4307

Economic Society Publication No. 2

INDIAN AGRICULTURE AND ITS PROBLEMS

GOVT GIRLS COLLEGE
SRINAGA
ACC. NO 4307.

Edited by

A. N. AGRAWAL, M.A.
Head of Economics Department,
Ramjas College, Delhi

Revised and Enlarged Edition

DELHI
RANJIT PRINTERS & PUBLISHERS

Published by
RANJIT PRINTERS & PUBLISHERS
4872, Chandni Chowk, Delhi
by arrangement with
Economics Society, Ramjas College, Delhi

First Edition 1951
Second Edition 1953

COPYRIGHT

Price Rs. 3/8/- or Sh. 7/-

Pg 313

Printed at The Movies Press, Delhi

PREFACE

One of the most urgent problems that face India to-day is the re-organisation of agriculture, the significance of which in the life and economy of the country cannot be over-stated. On this depends, to a large extent, the effective solution of our fundamental problems of hunger and poverty. It is, therefore, necessary to understand the major issues involved in the re-organisation of our agricultural economy.

An attempt has been made in this book, which is the second publication of the Economics Society, to study and critically evaluate, in a short compass, some of the major problems that confront our agriculture to-day. It is hoped that readers in general and students in particular will find it useful.

I sincerely thank the members of the Society who have helped me in various ways. I also take this opportunity of expressing my grateful thanks to Principal B.B. Gupta, Prof. K.N. Bhattacharya and Prof. H. Singh but for whose help and co-operation the publication would not have been possible.

March 8, 1951

A. N. AGRAWAL

PREFACE TO THE SECOND EDITION

Since the publication of the first edition of the book many significant changes have taken place in the different sectors of the national economy. In the light of these changes, all the previous essays have been thoroughly revised, enlarged and brought upto-date ; in fact some of them have been completely re-written. Two new chapters have also been added,—one on Community Development Projects and the other on Agrarian Reforms in China. I hope the book will now prove more helpful to its readers.

I am very grateful to my colleagues—Shri P. K. Ghosh, Shri C. K. Johri and G. Roy Chowdhary—who helped me in many ways in the preparation of this edition.

I am also grateful to all who have given me suggestions for improving the book and I shall welcome further help of this kind.

August, 1953

A. N. AGRAWAL

CONTENTS

		Page
I	Indian Agriculture : A General Survey	1
II	Co-operative Farming	25
III	Agricultural Finance	52
IV	Multi-purpose River Projects	73
V	Movement of Agricultural Prices	100
VI	Problem of Mechanisation	118
VII	Community Development Projects	138
VIII	Land Tenure Systems	150
IX	Our Food Problem	178
X	Agricultural Labour	203
XI	Five Year Plan and Agriculture	216
Appendix—Agrarian Reforms in China		226
Bibliography		237

INDIAN AGRICULTURE
AND
ITS PROBLEMS

CHAPTER I

INDIAN AGRICULTURE : —A GENERAL SURVEY

Its Place in National Economy

Agriculture has always occupied a place of pride our national economy. That role it retains even today inspite of the fact that the country is being steadily industrialised. The great significance of agriculture in our life and national economy is well borne out by the fact that it is by far the largest single industry in the country. It is the main occupation of the people. It gives direct employment to about 68 per cent of the total population of the country, and of the rural population nearly 90 per cent is directly or indirectly connected with it. As a matter of fact, agriculture in India is not merely an occupation ; it is a tradition, a way of life in itself which for centuries past has shaped our thoughts, coloured and fashioned our customs, conventions and usages.

Agriculture is also the premier source of our national income. According to estimates made before the Second World War, income from agriculture accounted for nearly 50 per cent of the total national income. The position even today is practically the same. The National Income Committee in its first Report published in 1951 puts the national income of India for the year 1948-49 at Rs. 8,730 crores. To this national income, agriculture contributed no less than Rs. 4150 crores *i.e.* 47·6 per cent.

Further agriculture provides the bulk of our exports. Agricultural commodities such as oil seeds, lac, tea, jute and cotton figure as the most important items in our export trade. They directly help us in earning considerable amount of foreign exchange resources which are extremely necessary for the financing of our different basic schemes of social and economic development.

Again, a very large amount of our capital is found invested in it. Agricultural holdings represent perhaps the largest fixed capital in the country. Irrigation works, farm implements and live-stock also indicate the vast amount of capital invested in our agriculture.

Yet again, agriculture forms the basis of our various industries including trade and transport. Some of our biggest industries, such as sugar and textiles, depend on agriculture for the supply of raw materials. Railways and other transport systems get bulk of their business from the movement of agricultural products. Similarly most of our trade transactions are in terms of agricultural goods. Besides, agriculture is also a very important source of revenue for the State Governments.

Above all, agriculture is the main source of food for the vast and growing population of the country which nearly comes to one-seventh of the entire human race, and fodder for well over 177 million cattle, representing about a fourth of the world's cattle population. The food production in the country kept pace with the growing population until 1930 when it began to lag behind. The separation of Burma in 1937 and the partition of the country that followed ten years later in 1947 still further aggravated the food problem. And now the country is confronted with indeed

a very difficult task of feeding a large and growing population on reduced food supplies.

The significant place of agriculture in the country's life and economy is thus quite evident. India is primarily an agricultural country. Agriculture is the basis of our national economy. This being so, let us examine the present state of condition of our agriculture.

Backward Agriculture : Its Consequences

Although agriculture occupies such a significant place in the life and economy of the country, its efficiency is among the lowest in the world. This may look quite paradoxical in view of the fact that India is known to be an agricultural country *par excellence*. She possesses great natural and other advantages in the sphere of agriculture. Yet the fact of her utter agricultural inefficiency and backwardness cannot be doubted. The extremely low yield of crops in the country is a clear index of it. India gets 660 lbs. of wheat from an acre of land where as Egypt obtains 1918 lbs., Japan 1713 lbs., and China 989 lbs. The average yield per acre in the country is nearly one-fourth of that in Italy in respect of rice ; one-third of that in Germany and Switzerland in respect of maize, less than one-sixth of that in Egypt in respect of cotton, and less than one-third of that in Java in respect of sugar cane. The table on the next page shows the average out-turn of crops in India and in some other countries.

The table is self-explanatory. It shows that the produce per acre is amazingly low in India, lower than in practically all other countries.

Yield per acre in lbs.

Country	*Wheat*	*Rice*	*Maize*	*Sugar cane*	*Cotton*	*Tobacco*
Egypt	1918	2998	1891	70,302	535	—
Germany	2017	—	2828	—	—	2127
Italy	1383	4568	2079	—	170	1139
Japan	1713	3444	1392	47,534	196	1665
U.S.A.	812	2185	1579	43,270	268	882
Java	—	—	—	1,13,570	—	—
China	989	2433	1284	—	204	1288
India	660	1240	803	34,944	89	987

Although the economic loss resulting from low yield is not always realised, if calculated, it would indeed be staggering. Our loss in respect of wheat alone is well explained by Sir Mac Dougall in his note to the Central Banking Inquiry Committee : "If the output per acre in terms of wheat were raised to that of France, the wealth of the country would be raised by £669,000,000 a year. If the output were in terms of English production, it would be raised by £1,000,000,000,...In terms of Danish wheat production, the increased wealth to India would be £1,500,000,000 per year." If such is the extent of loss in respect of one item alone, the total loss of national income on account of general low agricultural productivity will indeed be staggering to imagine.

Surely this appalling agricultural inefficiency or backwardness lies at the root of the crushing poverty of our rural masses which, it must be noted, stands in the way of progress in all spheres of life, economic, social and cultural. The effects of rural poverty, which in other words means India's poverty, have been spreading out in an ever widening circle, and are today linked with all the vital problems

of economic and cultural development. Indeed, without effectively tackling this problem, there can be no prospect of rapid economic development, progress of education, or of establishing high moral standards in individual and social life.

The low yield per acre is also the basic cause of our food problem which is at present causing a very great damage to the life and economy of the country. Millions of people in India suffer all their lives from slow famine and die in millions even in non-famine years due to low vitality and diseases arising from severe malnutrition. This directly contributes to economic inefficiency and a terrific waste of human resources. The problem is, however, getting still more complicated by the fillip that the food scarcity is giving to the rapid growth of population in the country. This may look paradoxical, yet it is true that the more the malnutrition, the greater is the frenzy of breeding and reproduction in order to carry on the species. Yet again food shortage is causing a severe drain on the country's limited foreign exchange resources which, we all know, must be conserved to purchase the much needed capital equipments and technical know-how. It is also responsible for the present creeping inflation. Thus in so many ways food shortage, which is essentially the product of our backward and stagnant agriculture, is complicating our problems.

It needs also to be emphasized that low agricultural productivity is a great handicap in the way of industrial development. By reducing the purchasing power of the masses, it has unduly restricted the market for industrial products. It has also created a serious problem of raw materials for our industries both in terms of quantity and quality.

Agricultural Development : Need and Scope

The foregoing analysis shows that agriculture is the very foundation of our national economy and further that, as it exists today, it is exceedingly backward. We have also seen that this agricultural backwardness lies at the root of appalling poverty, hunger and inefficiency in the country. These, in their turn, act and react cumulatively, thereby creating before the country a vicious circle, an economic deadlock wherein the different sectors of the economy, instead of being mutually complementary and helpful have become reciprocally inhibitive. As a result poverty is getting further intensified, and the task of progress, economic or otherwise, is becoming all the more difficult.

The urgency of increasing agricultural production in the country is thus quite obvious. The development of agriculture is extremely necessary for the proper tackling of our fundamental problems of poverty and unemployment without which no significant rise can take place in the standard of living of the masses in the country who, as has already been mentioned, are mostly engaged in agriculture. A rise in the standard of living and the purchasing power of the primary producers will widen the markets for industrial products and will thus help in the growth of industries. Industries will further benefit by increased production and higher quality of raw materials. It is thus evident that an efficient industrial structure can be built on the foundation of improved agriculture. Yet again, development of agriculture is necessary to solve the problem of food shortage in the country which has assumed serious dimensions in recent years. And it needs hardly to be emphasized that the physical, moral and spiritual well being of a nation is

vitally dependent on its satisfactory food supply. As such India cannot hope to become a first-rate nation, if men are hungry all around.

In brief, there is great urgency for agricultural development in the country in order to break the vicious circle, to resolve the economic deadlock, and thereby pave the way for economic development. Backward agricultural economies, like India, are characterised by rapidly growing population and over-crowding in agriculture. The task of bringing about economic development in such countries is essentially the process of engaging larger and larger number of people in manufacturing and other non-agricultural activities. While so engaged, the people have to be fed; raw materials have to be found, and also the workers have to be equipped with necessary capital goods and technical know-how. Bulk of the capital goods will have to be imported from other countries for which necessary foreign exchange will have to be found. All these burdens must necessarily fall on agriculture which it will be able to bear only when it is adequately improved. Developed agriculture will provide food and raw materials for non-agricultural workers. And what is still more important, it will create the surplus necessary for capital formation and for the import of essential capital goods. It is thus clear that in case of backward agricultural countries, increase in agricultural production is a vital condition for economic development and the tempo of development largely depends, in the initial stages, on the volume of agricultural production and the surpluses that are available from it.

This being so, the improvement of agriculture must form the focal centre of our economic planning. Our primary aim must be to improve agricultural production. That will help us to step up our economic structure to a higher level and also to secure a better balance in the economy.

Fortunately, the scope for agricultural development in the country is quite vast, both extensive and intensive, particularly the latter. Further extension of cultivation in India is possible by bringing cultivable waste lands and current fallows under the plough. The area classified as "cultivable waste" is 86 million acres, and the area covered by current fallows is estimated at 54 million acres. Though it is true that the so called 'cultivable waste lands' are not all truly cultivable, nevertheless even a cursory examination will show that a considerable area of it is good, fertile and cultivable land.

The area under current fallow is needlessly very large, and surely the country at the present can ill afford it. Under the existing system, a part of the land is regularly left idle to give it rest. It is no doubt true that with every cropping, there is some loss of natural fertility in the land which must be made up. But the system of fallowing is surely a very crude and wasteful method of enabling the land to regain its lost fertility. The progress in agricultural science has made fallowing unnecessary for efficient cultivation. This objective can be better attained through proper manuring and a suitable system of rotation of crops. In Western countries fallowing has been replaced by inter-tilled row crops like corn, potatoes and roots.

India, however, is an old country. As such the scope for further extension of cultivation is bound to be comparatively limited. But this is more than made up by the immense possibilities for improvement that the country has for intensive cultivation. This is very well revealed by the great disparity that is to be found between the yield per acre in our country and that in other countries. In most of the crops, our per acre yield is three to four times less than that of some other countries. With the aid of scientific cultivation, suitable land policy and efficient economic organisation, some foreign countries have been able to bring about a very great increase in agricultural productivity. There is no reason why, given these facilities, the same thing cannot be possible for Indian agriculture.

In this connection it is sometimes argued that agricultural productivity in large tracts of Europe and the U S.A. is high because there land has been brought under cultivation comparatively recently. Though the argument has some force in it, the high yield in those countries cannot be attributed to the nature of soil alone. In China agriculture is an ancient art, yet the average yield is very much higher than in India. And even in India, the yield is not only low but also shows wide variations from State to State. For instance, the yield per acre of rice varies from 961 lbs. in Madras to 586 lbs. in Bihar ; of wheat from 809 lbs in the Punjab to 122 lbs. in Hyderabad ; and of cotton from 126 lbs. in the Punjab to only 43 lbs. in Baroda. Though some variation in the average yield in the different parts of the country is bound to occur on account of differences in fertility of soil, rainfall etc., yet such wide disparities must be, to a large extent, due to a relatively low standard of

cultivation in the backward areas. Hence with the adoption of scientific cultivation, the yield in backward areas can come very near to that of advanced areas, and likewise India can come very close to the level of yield set up by some foreign countries.

It is thus obvious that there is plenty of wealth in the land to be exploited. If we utilise our inherent resources to their full potential, our national income can increase several times, and our standard of living will go up considerably.

Causes of Backwardness

The need to develop our agriculture necessitates an enquiry into the causes responsible for its low productivity so that suitable remedies may be found for the same. Quite a number of enquiries of this kind have been made from time to time by Government experts. They have analysed in detail the defects of our agriculture, and in most cases have reached the same conclusions. The same evils have been deplored, and similar recommendations reiterated by one expert body after another. But unfortunately the approach, until recently, was rather very narrow and faulty. The whole problem of low agricultural productivity was considered mainly from its technological aspect, quite in isolation from its social and economic back-ground. Their purely technological approach suffered from the defects of unreality and false abstraction. It is, therefore, not strange that their recommendations did not bear much fruits, for they could hardly be acted upon.

Since the development of agriculture is of vital significance for the country, the problem must be viewed in a comprehensive way, in all its aspects, taking into full account

the whole set of social, economic and technical factors that impede the progress of our agriculture. Some of the fundamental problems of Indian agriculture, the solutions of which are necessary before any significant advance can be made, have been dealt with in the succeeding chapters. Here we may only sum up the main defects in the existing land system and agricultural methods and organisation.

1. In the first place, there is an excessive pressure of population on land which has been steadily increasing for a pretty long time under the stress of the decline of cottage industries during the British rule and the rapid growth of population. In 1872 about 56 per cent of the people were engaged in agriculture. This proportion increased to 61·1 per cent in 1891, to 67·4 per cent in 1901, and by 1921 the number had jumped to 73 per cent. The National Income Committee put this figure at 68·2 per cent for 1948-49. The change in the percentage of people engaged in agriculture in recent years is more on account of the adoption of a different method of classification than any real lightening of the burden on land.

This too much over-crowding in agriculture, besides creating an occupational unbalance in the country as also involving a tremendous waste of human labour, has led to a continuous sub-division and fragmentation of holdings which is in a way the greatest single defect in our agriculture. The vast majority of our cultivators possess an area too small for efficient cultivation. Agriculture on tiny and scattered farms is uneconomic. The farmer cannot build his house on tiny bits of land. They can neither be fenced, nor ploughed properly. Even if water be available, it cannot be easily carried to them.

The use of tractors, construction of wells or effecting other permanent improvements on land are simply out of the question. And then there are wastes of numerous kinds.—waste of human resources, boundary lands, and of working cattle and agricultural equipment. As a result of all these, the cost of cultivation becomes excessive and the net value of the produce proportionately low, reducing agriculture to a state of deficit economy. Since agricultural farms in India are very small and scattered as well,—some of them in fact are not more than a mere fraction of an acre—, they cannot but render our agriculture uneconomic and compel a life of inescapable poverty for the farmers.

2. Besides the extremely uneconomic size of holdings, there is the lack of quality seeds which are essential for good crops. Though considerable work has been done in the country to evolve improved varieties of seeds, the results obtained in laboratories have not been exploited to any great extent. The seeds of improved quality have not yet come into popular use. This is borne out by the fact that hardly 10 per cent of the total cultivated area in the country is sown with seeds of improved variety. And even this little progress is mainly confined to cash crops such as sugar cane, cotton, jute and wheat.

3. The use of improved seeds will lead to good crops only when the soil provides them with adequate nourishment ; that is, when the soil is fertile. In India the level of fertility has become stabilised at a low level. This is not at all surprising. The agricultural land loses a part of its natural fertility every time it yields a harvest. Roughly it is estimated that an ordinary crop takes away

abobt 26 lbs. of nitrogen from one acre of land. If this is not made good by the application of adequate and right kind of manures and fertilisers, the fertility of the land will decrease and so will the yield. Natural processes do help in restoring soil fertility, but only partially.

In our country soil constituents are removed year after year in the form of produce, but hardly anything is done to replace them by proper manuring. Cattle dung or farmyard manure is one of the best natural manures. It is rich in soil nutrients and is also readily available without any cost. But mainly out of necessity, the Indian farmer burns it as fuel. Refuse is another rich source of organic manure. In China and Japan sweepings, night soil, rotting vegetable matter, all find their way into fields. In our country, however, the value of refuse is not yet sufficiently realised. Some towns and villages burn it, some merely dump it, while others pollute rivers and lakes. Then there are chemical fertilisers, but they are comparatively costly. Hence their use is restricted.

Thus the soil in India literally starves. It has to depend mainly on the recuperative efforts of natural processes to regain its lost ingredients. No wonder then that the fertility of our soil has become stabilised at a low level.

Another menace to fertility is soil erosion. Large tracts of land have been gradually renderd unfit for profitable cultivation by the formation of injurious salts and by the action of flood water in either eroding the surface soil or burying it beneath deposits of sterile material. The problem of soil erosion, though common to the whole

country, has assumed serious proportions in particular areas like Chhota Nagpur, Madhya Pradesh, Rajasthan, Uttar Pradesh, etc.

4. Along with good seeds and fertilisers, there is also the need for timely supply of water in adequate quantities Without this efficient cultivation is impossible. In our country we are mostly dependent on rainfall for the supply of water to our fields. But monsoons are highly uncertain and irregular. The capriciousness of rainfall in our country manifests itself in a variety of ways. In any particular year, the rains may not arrive at all, or they may come in torrents. Again, they may start too early or too late, or yet again the rains may not be sufficiently prolonged and well distributed. All this upsets agricultural work, resulting in partial or complete failure of crops. And the tragedy is that the uncertainties or abnormalities of rainfall in India are the general rule, rather than the exception. As such the harm caused by them is a normal feature of Indian economic life. There is hardly any year when scarcity conditions, brought about by the failure of monsoon, do not prevail in some part of the country or the other.

Irrigation can afford security against the vagaries of rainfall. But in India roughly only one-fifth of the total net cultivated area is under irrigation. The rest of the lands are still at the mercy of this monsoon. Naturally, therefore, failures of rainfall which are a normal feature of our life cause extensive damage to crops and financial loss to cultivators. Can any one then wonder at the backwardness of Indian agriculture, or at the poverty of cultivators.

5. The methods of cultivation in India are also far from satisfactory. It is a well established fact that a suitable system of crop rotation is very essential for the maintenance of soil fertility. Some crops are known to tax one particular soil nutrient more than the rest. So if the same crop is grown repeatedly, the soil will become highly deficient in that nutrient. If, on the other hand, another crop is grown which uses a different nutrient, the soil will be able to recuperate its fertility easily. This is the reason why proper crop rotation is necessary for efficient agriculture.

The Indian cultivator, no doubt, knows the value of crop rotation and mixed cropping. They have been in vogue in the country for a long time. The pressure on land and the lure of money have, however, encouraged our farmers to concentrate on certain crops, particularly the cash crops such as cotton, sugarcane and wheat. This excessive concentration on cash crops has considerably lowered the former standards of crop rotation which in themselves required improvements with the aid of research and experiment. The consequences of this have been quite bad. It has further intensified the evil of soil depletion besides encouraging the growth of certain plant diseases and pests.

6. The productivity of land in India also suffers to some extent because of the obsolete and inefficient nature of tools and implements with which the Indian cultivator normally works. "In the major part of India, the farmer uses a wooden plough which stirs, rather than inverts the soil. The seed is merely broadcast and then ploughed into the earth. He cuts the harvest by hand, threshes the

grain under the bullock's feet and winnows cereals by the agency of the wind."[1] Most of these tools and implements have remained essentially unchanged since perhaps land was first brought into cultivation. Even if they served their purpose well in the past, they are unable to yield corresponding returns in these days of rapidly increasing strains on land.

In most of the advanced countries, great improvements have been effected in agricultural implements. There the farmers now make use of the most up-to-date and efficient implements, including power-driven machinery for tilling, sowing, reaping, storing etc. These modern scientific devices have ensured the farmers better and more crops at reduced costs. In India, however, not much progress has been made as yet in this direction. This is partly because it means new capital investment which the average cultivator is too poor to afford, and partly because their use on very small holdings would be uneconomic.

The same is true of our cattle. Though we have about a fourth of the world's cattle population, they are probably one of the least efficient in the world. Indiscriminate breeding in the rural areas and poor feeding have caused great deterioration in the quality and efficiency of our cattle. It is said that about 50 per cent of the cattle in India are more a drag on the country's resources than an aid to the exploitation thereof.

7. Then there is the problem of rural finance and of indebtedness. A cultivator requires finance for a variety of purposes—finance for annual production needs such as

[1]Nanavati and Anjaria—Indian Rural Problem, page 47.

those for seed, manure, wages, etc.; finance for development and conservation of resources like construction of wells, embankments, tanks, etc. [illegible]ance to meet distress-times occasioned by the incidence of famine, flood or any other calamity. "In fact a cultivator needs more credit than most industrialists because he must maintain himself and his family for several months during each season while the crops are growing and does not get any return till he has harvested and sold them."

Borrowing is thus so necessary in agriculture, but in our country there are no satisfactory arrangements for the supply of the requisite rural credit. The joint-stock banks play little part in the supply of credit to agriculturists. In fact, they do not look upon agricultural finance as a part of their general business. The Government also plays a very insignificant part in the matter of supplying rural finance. The advances of the Government to cultivators, known as *taccavi* loans, are more or less confined to emergency or distress-times. The amount supplied by the co-operative credit movement is equally small. Though the movement is expanding, the percentage of the population served by it is still very small. As yet it has not gone into the heart of the village. Thus there remains only the village mahajan in the field as the main prop on which the entire structure of rural finance rests. He is the main source of credit for the cultivator.

Under the existing system of rural finance, the cultivator is simply unable to get long-term credit for development purposes. Even the short-term credit cannot be obtained except at exhorbitant rates. Under such arrangements for

the supply of finance, no business enterprise can be run efficiently.

'The indispensability of the village mahajan, coupled with the inevitability of borrowing in agriculture, particularly by the small farmer, has made the whole system of rural finance very defective. This, in turn, is accentuating the evil of indebtedness which, as we all know, lies at the root of our rural problem. The vast majority of our cultivators are heavily indebted. It is rightly said they are born in debt and also die in debt. This indebtedness is undoubtedly a very great menace because it gives rise to serious economic, social and moral consequences. It leads directly to agricultural inefficiency. A cultivators, over-burdened with debt, loses interest and initiative to that hard work without which no farmer on earth can get the best from the soil.

8. The cultivator in India also suffers from great disabilities and handicaps in the selling of his produce. In many cases, while taking loans from the money-lender, the dealer or the broker, he gives a lien to the lender on his crops. In some cases, he is compelled to sell at a price previously fixed, or on other terms materially profitable to the lender. But even when the crops are not so mortgaged, he fares no better. Being short of ready money and thus unable to meet the demands of the money-lender, the rent collector and others, he has to sell his produce in the first available market for what it will fetch. As such in either way, he is a loser. He does not get the full value for even the little produce that he is able to raise. According to the Report on Marketing of Wheat in India (1941), only eight annas and a quarter out of a rupee paid by the customer

reach the hands of the real producer. His share is said to be still less in the marketing of other commodities. Lack of sufficient finance, cheap and good means of transport, suitable warehousing facilities, absence of grading and standard weights and measures, the levy of a number of incidental charges and imposts, the existence of a long chain of middle men, and the secret settlement of prices are all contributing to this state of affairs. This distributive injustice is bound to affect efficiency in agricultural production very unfavourably.

9. Another disability of the peasant is the fluctuation of prices. Indian agricultural economy, with its rigid and high cost structure but now thrust into an international economy based on competition, has become today a gamble in world prices, besides being a gamble in rains. The surplus with the cultivator even in good times is so small that a slight change in the price of agricultural products is enough to cause him acute distress and deplete his working capital.

10. There is also the lack of general and agricultural education of the peasantry. While the experts have spoken highly of the intelligence and empirical knowledge of the Indian cultivator, this much is true that "in the utilisation of his hereditary skill, in the economy of the means of production, and in the practice of organised self-help, he is generally ignorant and backward." His ignorance is a handicap in utilisation of the knowledge that science has brought together to promote the growth of plants and animals. Consequently agriculture in India has remained backward, and out-moded.

11. Yet another defect in our agricultural economy is the lack of an adequate economic organisation of agriculture. In the past there was a perfect organisation in the form of village community. The village community maintained a balance between cultivated area, pasturage and forests. The management of common lands and pastures, distribution of water for irrigation, allotment of land to new comers, periodical redistribution of land among cultivators were all under the village community. Besides these, it also distributed the total land revenue demand of the village among individual cultivators with regard to their conditions, and the quality and area of land under their occupation. So in this way the economic activities of the cultivators were properly co-ordinated and adjusted by the village community to the benefit of one and all.

This useful organisation later on broke down with the advent of British rule, the progress of centralised administration, the increase in the means of communication and the establishment of the zamindari system. But its functions were neither taken up by the landlords, nor by the State. Thus in place of the old joint-village organisation, no new organisation has been created, though the need for it is much greater to-day than what was before on account of the steady commercialisation of our agriculture and the increasing complexity of economic forces.

12. Again, there is the lack of organised associated, subsidiary or supplementary industries to help the cultivators to tide over the difficulties caused by the seasonal character of the main occupation. Cultivators in India do not have full and regular employment all the year round.

They remain unemployed for a considerable part of the year, ranging between three to six months. This long enforced idleness still further aggravates their poverty and indebtedness. As a consequence inefficiency in agricultural production further increases.

13. As already mentioned, agriculture in India is a very uncertain industry. This is so because it mainly depends upon rainfall which is known to be an exceedingly uncertain phenomenon. Droughts, floods, and other calamities occur in the country with distressing frequency, causing great damage to crops, cattle and property. Yet there are no adequate arrangements to safeguard the poor cultivators from their evil effects.

14. Crop pests, insects and diseases play havoc with the crops and are a constant source of worry to farmers every where. In India their depredations destroy as much as one-tenth of the total production, a staggering figure indeed. A good deal of work has been done in our laboratories to combat the various enemies of crops—locusts, rusts, jungi of different types, etc. But unfortunately equally rapid progress has not been made as yet in the practical application of the different means and methods of protecting the crops discovered in the laboratories.

15. Above all we have in the country an antiquated semi-feudal type of land system which leaves no impetus for the tiller of the soil. An exceedingly large area of our land is in the hands of absentee landlords who, under the existing land system, enjoy authority and power out of all proportion to any useful function performed by them in agricultural economy of the country. They lease out their lands, for purposes of cultivation, to tenants who have

depressed social status and whose rights in land, as compared to those of the landlords, are of an inferior nature. Naturally this gives rise to a feeling of insecurity because of the fact that in case of any trouble or conflict of interests, the tenant is inevitably the weaker party.

Besides suffering from a feeling of insecurity, the tenant is highly rack-rented. Though the conditions of tenancy differ from place to place, ordinarily he bears himself all the costs of cultivation and gives to the landlord about 50 to 60 per cent of the gross produce as rent. In a country of small holdings, such proportions of rent payments are definitely high. The amount that remains with the actual tiller is not enough to maintain him and his family and to meet the needs of agriculture. As such he lacks resources to invest in agriculture. Not only this, he lacks even the incentive for efficient land utilisation and management due to his depressed social status and feeling of insecurity. On the other hand, the landlord too being assured of some return from his land, does not take any interest in the land. So in this way, making any improvement in land has become no body's business. Neither the absentee landlord, nor the short-term tenant is interested in investing capital in land, or in adopting intensive methods of cultivation. Such is the defective land system of our country. No wonder then that agricultural efficiency in the country is so low.

16. Like land tenure, our system of revenue also is highly obsolete, uneconomic and unjust. It lacks a uniform basis of assessment and the period of settlement differs widely from one region to another. It is inelastic and bears no relation to the productive capacity of the

CHAPTER II

CO-OPERATIVE FARMING

Our Agricultural Holdings

Success in agriculture depends to a considerable extent upon the size of the unit of cultivation. If the size of the farm is inadequate or uneconomic, the other factors of production cannot operate fully or to the extent that is necessary. This will naturally render the work of cultivation inefficient and even unprofitable. In this context when we look to our agricultural holdings, we find that they suffer from two very great defects. In the first place the size is extremely small. On an average the Indian peasant cultivates less than five acres, whereas his British counterpart cultivates 21 and the American 145 acres. Secondly even these small holdings are not to be found in compact blocks. They are generally fragmented into a number of plots scattered over different parts of the village. On an average a holding, whether big or small, is found fragmented into 5 to 8 strips. In some places fragmentation has been carried to such extremes that the holdings are not more than a mere fraction of an acre, making the villages look like jig-saw puzzles.

This evil of sub-division and fragmentation of holdings has been brought about by a number of factors. Principally this is the product of the terrific pressure of population on land which is chiefly due to the growth of numbers and

the unbalanced occupational distribution of our population. The expanding population, in the absence of alternative employments, is continuously adding to the burden on land, naturally resulting in smaller and smaller size of holdings. Equally important is the law of inheritance in the country which permits the division of the ancestral land amongst the heirs. With every division of the ancestral property, the size of each man's holding naturally becomes smaller and smaller. This process has gone on for centuries and still continues. Of course in recent years its effect has been greatly enhanced by indebtedness, forced sale, land hunger among peasants' creditors, and the growing spirit of individualism. Further, "sub-division is also encouraged by the fact that the fields in India are open and without hedges and thus lend themselves to easy and speedy division".

Thus so many diverse factors have led to continuous sub-division of holdings in the country reducing many of them to mere toys. Sub-division is, however, only one aspect of the problem. Fragmentation is another. This results from the method of sharing the holding. At the time of succession each heir invariably demands his share in every kind of land. As such with every sub-division of holdings, fragmentation also takes place.

Certainly it does not require much knowledge of economics to appreciate why the Indian peasant who cultivates these small and scattered bits of land is so poor, or why agricultural productivity in the country is so low. Agriculture on tiny and fragmented farms is simply uneconomic for the cost of cultivation becomes excessive and the net value of the produce proportionately low. It involves wastes

not only of human resources but also of working cattle and agricultural equipment. A good deal of labour and time is lost in going from one plot to another. It also stands in the way of adopting large scale cultivation, mechanisation and effecting permanent land improvements such as well construction, maintenance of banks and drains to check soil erosion and water-logging of the low lands. Again, small holdings do not permit of capital accumulation. Consequently, the cultivator has neither the means for building up reserves against the frequent bad years, nor has he enough working capital for improved farming or for maintaining the fertility of the soil. Moreover, the farmer cannot build his house on these tiny bits of land, as a result of which personal supervision of the crops is greatly hindered and the work of management becomes exceedingly difficult. Further more, fragmentation of holdings involves considerable wastage of boundary lands. It is also responsible for numerous disputes regarding boundaries, right of passage for men, cattle and water which frequently result in costly litigation.

As a result of all these, the cost of cultivation has become excessive and return proportionately low, rendering our agriculture utterly inefficient and unremunerative. This being so, the foremost step in the planning of our agriculture would be to devise ways and means for bringing about an increase in the size of the unit of cultivation. Unless, this is done, capital and organisation, which are acknowledged to be the secrets of successful operation in the modern age, will not be able to play their role effectively. And till then productivity will not considerably increase and our agriculture will not be in a position to attain a condition of either competitive efficiency or profitability.

What is then the remedy ? The usual remedy that is suggested is consolidation of holdings which consists of substitution, by mutual exchange of land, of a compact block for a number of separate fragments. The Punjab has been a pioneer in undertaking this important reform. Initially the work of consolidation was carried out in that province on a voluntary basis through a special type of co-operative society. In 1936, Consolidation of Holdings Act was passed which provided for a certain measure of compulsion. Consolidation operations, undertaken under this Act, have been carried out in 376 villages and 0·31 million acres have been consolidated. This measure has also been tried at a few other places like Uttar Pradesh, Madhya Pradesh and Baroda. But, except in the case of the Punjab, where certain favourable conditions exist, attempts at consolidation have not been very successful.

In connection with this measure of reform, there are certain things which deserve our attention. Firstly, consolidation of holdings is necessarily a very slow process. Co-operative societies have to encounter numerous difficulties in the process of consolidation such as peasant's indebtedness, lethargic attitude of the people, sentimental attachment to particular fields, want of adequate areas of the same kind of land for exchange, and so on. As a result of all such handicaps, the work of consolidation becomes painfully slow. This fact is of great significance for us because of the reason that the process of sub-division and fragmentation has gone to very extreme limits. Further, the advantages of increasing the size of our 'dwarf holdings' can be successfully and effectively reaped only when the peasant owners have the necessary amounts of capital for

investment in the land. The peasants of India are, however, too poor to satisfy this condition. But what is still more fundamental is that consolidation can at best be only a temporary palliative for us, and that also only for fragmentation. For under the existing laws of inheritance, which are based on the principle of equal inheritance, holdings are bound to become smaller and fragmented at every successive division.

When so confronted, many readily recommend the adoption of the rule of primogeniture or 'preferred heir' in the place of the existing law of inheritance. Such an action, it is claimed, will remedy the evil of sub-division and fragmentation and thus will enable the system of peasant farming to show good results. This is, of course, true that an optimum peasant farm can hold its own against large scale farms or, in other words, that peasant farming on economic units is an efficient type of agricultural organisation. But the thing that is to be considered here is the feasibility, perhaps even the desirability, of the suggested measure. We very well know that the principle of equal inheritance, which is the expression of the society's sense of justice and fair distribution of the available opportunities, has been an integral part of the structure of our rural economy since very early times. It has taken so deep roots in the hearts of peasants that any radical modification of this sacred and time-honoured law of Indian society is bound to be severely opposed by them. And it is simply idle to think that the principle of preferred heir can be introduced inspite of popular opposition. We can, therefore, say that the principle of primogeniture or any such radical modification of the law of inheritance is

not a very practicable means to avoid the evils of uneconomic holdings and thereby to make Indian agriculture efficient.

Thus the case for peasant proprietorship becomes rather very weak. We have just seen that on an individualist basis, there is no practicable method of increasing the size of holdings without which intensive farming is simply out of question. The small cultivator has neither the capital, nor the organisation to effect economies in the cost of production and thus to realise the technical possibilities of increased production. The various problems that confront our agriculture to-day are so vast and inter-linked with one another that they cannot be effectively tackled by the cultivator with a small farm on an individual basis. We are, therefore, led to the conclusion that for the development of agriculture, the urgency of which can in no case be questioned, there is the need to replace the individualist petty farming by joint farming.

The re-organisation of our agriculture on the basis of some kind of joint action on the part of peasants can, in the main, take two forms, *viz.*, collective farming and co-operative farming. Let us examine these two alternatives and see which of the two will suit us more. We take collective farming first.

II

Collective Farming

Under collective farming ownership of all the land, stock and capital vests in the community as a whole. Private property in land and individual holdings are completely abolished. Members of the collective farm are treated as equals; no distinctions are made between one

member and another on account of birth or inheritance. Cultivation is carried on the whole farm as one unit of organisation under a management committee elected from among the members. The committee lays down programmes of daily work, directs and supervises the performance of all agricultural operations. It also organises credit, supply, marketing, insurance, etc., and makes suitable arrangements for special social services such as education, medical aid, and recreation centres.

Generally speaking, members get wages according to the nature and extent of work done by them, and the distribution of the profits of the farm is made on the basis of wages so earned. Since all work is not treated as equal, nor is the skill and capacity to work of each member the same, differences in incomes are to be found. But it must be noted that under collective farming, differences in incomes arise only on account of differences in the nature and quantity of work done by individual members, and not due to the virtue of land which belonged to them before the introduction of collective farming. In certain cases, both production and consumption are communal. A member shares in everything provided by the farm,—clothing, housing and other amenities—by virtue of being a member, and not in proportion to the work done by him.

Russian Collectives

Althought experiments in collective farming have been made in different parts of the world, the most classic example of successful working of collective farming is that of the U.S.S.R. The Russian Collectives are of different types such as *Toz*, *Artel* and *Commune*. Of these, the

Artel or the *Kolkhoz* is the most prevalent form of agricultural organisation. Under this organisation, all the means of production are socialised, *viz.*, land, labour, working cattle, agricultural implements, seeds, supplies of fodder, and farm buildings. The members of the *Kolkhoz* are, however, allowed to have their own private orchards, vegetable gardens, household dwelling, livestock and poultry.

The management of the collective farm is organised on democratic lines. The general assembly of members is the supreme organ for the management of the collective farm subject to state regulations. This assembly elects a Management Board of five to nine members for a period of two years. The Board is the executive body of the collective farm and is accountable to the general meeting of members. The chairman of the general assembly is the ex-officio chairman of the board of management. He is responsible for the day-to-day routine of the farm.

The members of the farm are classsified into groups or brigades which are made responsible for carrying on specific jobs over specific areas of land. The work of each brigade is fixed by the board of management. The brigade leader, who is elected in the general meeting, checks up the work done by the members of his group.

With regard to the payment for work done by the members, the collective farms have adopted a special method of valuing and paying in units known as work-days. The usual practice is to fix a standard quota for each type of work on the collective farm according to the skill, technical ability or physical exertion involved. Thus, if any work requires special efficiency or ability as compared to another, it is graded up to a higher equivalent in work-day

units. The brigade leader is responsible for maintaining the record of work-day units put in by each member. A list showing the number of work-day units earned by a member during the preceding month is put up for information every month. To stimulate interest and encourage efficiency, special bonuses in the form of additional work-day units are given for an increase in labour productivity over the average of collective farm. This gives every collective farmer a direct material interest in the results of his work.

To assist the collective farms, the State has established Machine and Tractor Stations (M.T.S.) all over the country. They possess up-to-date tractors, harvesters, threshers, and other farming machines and implements. They have in their staff not only technicians who run the tractors and train the members of the *Kolkhoz* in the handling of modern agricultural machines, but also agricultural experts who give advise on matters relating to crop rotation, proper use of fertilisers, conservation of soil and such other allied agricultural problems. Each M.T.S. serves, on an average, for 30 *Kolkhozes* on the basis of special contracts. The role of the M.T.S. in revolutionising Russian agriculture has, indeed, been very great.

The collectivisation of Russian farms has resulted in a tremendous increase both in the total cultivated area and the total yield. Official statistics show that the total area sown in 1940 was about 30 million hectares more than in 1913 which is regarded as the best year of pre-Revolutionary times. The yield of wheat increased to 442 million centners in 1931, and that of oats to 207 million from 112 million. Progress was made in the production of commer-

cial crops as well, such as cotton, flax, etc. Compared with 1913 cotton production increased 3·5 times, sun-flower 4 to 5 times, sugar beat about 2 times.

As a result of enormous increase in production, the income, and hence the standard of living of the farmer, has gone up considerably. Between 1935 and 1939 the average amount of money paid out per collective farm household increased by three and a half times. The rise in the standard of living of the peasantry, thus brought about, has led to social, cultural and moral development as well. Literacy among the people has risen from barely 8 per cent in the pre-Revolution times to about 85 per cent at present. Discipline, courage, loyalty and patriotism of the peaple were proved beyond doubt during the Second World War.

Collective Farming Unsuitable for India

Encouraged by the success of Russian collectives, some enthusiasts recommend collective farming for India as well. Russia has clearly shown, they say, that by collective effort, retaining some measure of private initiative, it is possible to abolish agricutural stagnation, when private farmers, unaided, impoverished and ignorant, have reached the bitter end of their restricted tether. Though accepting the fact that the Russian agriculture has vastly progressed as a result of collective farming, careful examination of certain things will convince us of the unsuitability of this measure as far as our country is concerned.

Collectivisation inevitably involves complete abolition of private property in land. In our country individual ownership of land has been in existence from times immemorial. There is a deep attachment to the ownership

of land. The attachment is not only strong, but is further strengthened by affection and reverence. As such any proposal which involves the abolition of this valued right, which has been freely exercised since the earliest recorded times, is bound to be severely opposed by the present owners, and also the hereditary tenants who together constitute the back-bone of our agriculture. The opposition is not only natural, it becomes justifiable in case the owners of factors of production in other fields are left undisturbed. Why should the peasant alone be forced to surrender his rights in land ? Since the measure is bound to be opposed by the peasants, it will be unwise to push through the scheme of collectivisation. It will involve colossal repression which, in its turn, will give rise to many difficult socio-economic problems. At the same time, we must not ignore the fact that in order to be successful in our task of reorganising the agricultural economy, we must have the peasants with us, and not against us, particularly so because ours is a democratic state. A democratic government, representing the people, cannot think in terms of coercing the vast mass of peasantry.

Hence we find that under the existing conditions, collective farming will not be suitable for the country. Any attempt to ignore the existing conditions, which at every step guide and determine economic and social progress, is to invite disaster.

From what has been said so far, two things clearly emerge out. Firstly, there is the need to reorganise our agriculture on the basis of some kind of joint action or management. This will make scientific cultivation possible which is indispensable for a permanent solution of the

problem of increased agricultural production in the country. Secondly, there is a great attachment to the ownership of land and to the principle of equal inheritance. It is so deep rooted that to make an attempt to uproot it will be risky. Hence we need such a scheme of re-organisation of agriculture which can satisfy these two conditions; that is, a scheme which leads to joint farming without disturbing the rights of ownership and inheritance.

III

Co-operative Farming

Co-operative farming, as will be shown presently, can meet the above two conditions very well. It will not only ensure conditions conducive to large scale farming, but will also eliminate any possible threat to the rights of ownership and inheritance which form a part of our Constitution. But the term 'co-operative farming' is used differently by different persons. It is, therefore, necessary to see what particular forms does co-operative farming take and what are their essential features?

The application of co-operation to farming may, generally speaking, take four forms. Firstly, it may take the form of Co-operative Better Farming Society, based on individual ownership and individual operatorship. In this form, the holdings of individual owners remain distinct and co-operation is extended to a number of operations. For example, individual owners may cultivate their holdings independently, but they may co-operate in buying, selling, use of machinery, joint arrangements for watch and ward, etc. There is, however, no compulsion on the part of a member to follow any plan of cultivation laid down by the society.

Each member is independent except for the specific purposes for which he joins the society.

Secondly, it may take the form of Co-operative Joint Farming Society. In this case the right of individual ownership is recognised and respected, but the owners pool their land for purposes of cultivation on joint basis ; that is, there is individual ownership but collective cultivation. Members work on the pooled land according to the directions of the elected management committe. Each member gets wages for his daily work. His right of ownership is recognised by the payment of a dividend in proportion to the value of his land. The produce which is jointly raised is disposed off collectively. The proceeds of the sale, after meeting all the expenses of production, including the payment for the use of land, wages, price of seeds, manure, water etc. are shared by the members in proportion to wages earned by each. The main functions of the joint farming society are to prepare the crop-plan and to undertake all agricultural operations on joint basis.

Thirdly, co-operation may assume the form of what may be termed as Co-operative Tenant Farming Society. In other words, there may be collective ownership but individual operatorship. In this case, the society owns land in free-hold or lease-hold as the case may be. The collectively owned land is divided into a number of separate holdings, each of which is leased out to the individual tenant-cultivator who is a member of the society. Each tenant member pays a fixed rent for his holding. Although the society undertakes to supply agricultural requirements like seeds, manures, credit, etc. and also makes arrangements for the sale of produce, it is not

binding on the members to avail of these facilities. They are free to raise their produce and dispose it off as they like. Thus in this type of society, the superior landlord is replaced. The members, in a way, become their own landlords. This would mean fixity of tenure and freedom from the oppressions of the landlord.

Fourthly, there may be collective ownership as well as collective operatorship. Such a society may be given the name of Co-operative Collective Farming Society. The society possesses a free-hold or a lease-hold on the land and uses its members as paid workers to cultivate the land according to its crop-plan. In this case, the workers on the farm remain neither individual owners nor individual cultivators. They work jointly in return of which they get wages. At the end of the year profits are worked out after meeting all expenses of production and are divided in proportion to the wages earned by each member, When so organised, co-operative farming becomes very much similar to collective farming.

Thus we find that co-operative farming covers a very wide range,—from individual owner-operatorship to collective owner-operatorship. Experiments in these different forms of co-operative farming have been carried out successfully in several countries of the world, notable among them being Palestine, Mexico, U. S. A. and the East European countries. The objects of adopting co-operative farming have varied in different countries according to their particular needs and environments, *e.g.*, development of fallow land, rehabilitation of refugees, grouping of small farms, economy in the use of machinery, etc. Obviously, therefore, different countries have

chosen different forms of co-opertive societies to suit their special needs and conditions,

In most of the countries where co-operative farming has been tried, there has taken place a great change in the economic, social and cultural life of the people. Through it, they have availed themselves of advantages of large-scale farming and have thereby increased production and raised their standard of life. This has also brought to them a sense of economic and social security.

IV

Scope for Co-operative Farming in India

The successful re-organisation of our agriculture, with a view to increase agricultural productivity and to raise the standard of living of the peasants, demands the adoption of co-operative farming. It will lead to many beneficial results both in the economic and social spheres, with none of the drawbacks of peasant farming and collectivisation. In this we will find a solution for over-coming the evil effects of small and scattered holdings and for enabling the small farmers to obtain the benefits of large-scale farming. This form of organisation will help the small farmer to increase production at greatly reduced working expenses by providing to him the economies of large-scale enterprise in obtaining credit, purchase of stock, equipment or raw materials, marketing of produce, employment of agricultural experts able to initiate and develop the best technique in farming, optimum use of land, labour and capital, efficiency of work, organisation and management. At the same time, the interest of the peasants in their land will be retained.

Besides these material benefits, the application of co-operation to farming will produce many desirable effects in the social and moral spheres. It will help to develop among the peasants social sense, a strong democratic spirit and, above all, a feeling of security. Co-operation, it must be remembered, is perfect democracy in action. It cuts rightly across all the artificial compartments into which humanity has grouped itself and is also a great check on all anti-social urges, such as greed, selfishness or personal aggrandisement. At the same time, it also avoids the tendency to drab uniformity, regimentation and bureaucratisation. Co-operation is, indeed, a happy and perfect midium between capitalism and state socialism.

The various benefits, economic and social, which will accrue in the event of successful re-organisation of our agriculture on the basis of co-operative farming will not be confined to peasants only ; they will spread out in an ever widening circle to the good of the community at large.

The organisation of co-operative farming societies will be helpful to the country in many more ways. It will ensure, for instance, closer contact and co-operation between farmers and the Government which is highly essential for our country in view of the fact that India is virtually a land of farmers. Again, in times of emergency, the Government will find it much easier to execute their agricultural policies relating to procurement of food grains, regulation of crop production, etc., through the medium of co-operative societies. Besides this, the task of collecting reliable agricultural statistics, which are so necessary in the framing of appropriate policies, will also be greatly facilitated.

Such are the numerous benefits which flow from co-operative farming. But what about its scope in India? Taking all relevant factors into consideration, it can be easily shown that there is a vast scope for undertaking farming on a co-operative basis in India. There are about 86 million acres of cultivable waste land spread over the whole of the country. In pursuance of the food self-sufficiency plan, the Government have formulated schemes to reclaim four million acres of weed-infested and two million acres of idle land during the next five years. A beginning has already been made and over 100,000 acres have been reclaimed. It is expected that there will be accelerated progress in reclaiming land in future. These large areas of land, which have been and are being brought under cultivation under the various land reclamation schemes and multi-purpose projects, offer excellent scope for co-operative farming.

A study of the economic history of Palestine, Italy, U.S.A. and other countries reveals the effectiveness of co-operative farming in making maximum use of the reclaimed land as well as in moulding the social life of the settlers. If we want to promote and preserve the democratic way of life for the new settlers, and at the same time derive the utmost benefit in the field of production from the reclaimed land brought under cultivation, co-operative farming in some form or other will have to be adopted.

The scope for co-operative farming in the areas which are at present under zamindari system is equally great. In several provinces, particularly in Madras, Bihar, Uttar Pradesh, West Bengal, Orissa and Assam steps are being taken to abolish zamindari. The Bills of Uttar

Pradesh, Madras and Bihar relating to the abolition of zamindari have already received the assent of the President. In other provinces also abolition of zamindari is in sight.

The abolition of zamindari will surely create a great psychological change in the countryside. It will give to the tenant a new social status and also the much needed feeling of security and confidence. Without undermining the tremendous significance of the new status that the tenant will achieve as a result of the replacement of zamindari, it must be remembered that the zamindari system is only one among a large number of factors contributing to agricultural inefficiency in the country. Abolition of zamindari is, no doubt, a necessary pre-requisite for the improvement of our agriculture, but its abolition will not, by itself, bring in an era of plenty and prosperity unless accompanied by appropriate measures to tackle other intricate problems relating to soil erosion, manure, irrigation, improvement of live-stock, size of farms, and methods of cultivation. All these problems are intimately bound up with one another and require large capital and organisation for their solution. As such they cannot be effectively tackled on an individual basis. Till then no real improvement can take place. Therefore, if full benefit is to be derived from the above reform, some form of co-operative farming will have to be adopted. Such steps had to be taken in Hungary, Yugoslavia and in other countries when they were carrying out similar land reforms.

The scope for organising co-operative farming societies exists even in ryotwari areas, although here the task will be comparatively more difficult. In these areas, which covers

about 36 per cent of the total land held under different tenures, one will come across farmers who are proverbially conservative, cultivating small, disjointed bits of land with primitive tools and methods of agriculture. It is in this area that there exists great attachment to ancestral lands, however small and uneconomic they be. Here the introduction of co-operative farming will have to be attempted in a very careful and gradual manner. If on account of extreme individualism or any other reason, it is not found feasible to organise a tenant co-operative society or a joint-farming society, a beginning may be made by organising a better-farming society.

There is not only considerable scope for organising co-operative farming societies in the country, there is great urgency too. The food problem is becoming increasingly acute day by day. Same is true of the problem of raw-materials for our industries. Then there is also the vital problem of rehabilitating large masses of refugees, most of whom belong to agricultural classes. The solution of these problems requires an early adoption of co-operative farming in one or the other form. This will help us in getting the benefits of large scale production and at the same time create among the new settlers interest in the land that they are called upon to cultivate.

V

Choice of the Different Forms

Admitting the suitability and wide scope for co-operative farming in India, it may be asked : which of its different forms can be successfully adopted in the country ? The choice obviously will have to depend upon the environments ,

social customs, psychological make-up of the people, and the conditions of farming in the respective areas. The best thing in this connection would be to make experiments with various methods of co-operative farming and then decide finally. Yet there are a few observations which can be made with regard to the choice of particular forms of co-opertive farming.

Of the four forms, the Better Farming Society, which is based on individual owner-operatorship, appears to be in the nature of the preliminary stage. It is a case of partial co-operation. Here co-operation is extended to cover everything except the main productive activity, *i.e.*, agricultural production. If individual holdings are sufficiently large and the peasants are rich and they are also willing to co-operate in as many operations as possible, then certainly much can be achieved even through Better Farming Societies. Such societies have done splendid work in Denmark and some other European countries. In our country, however, the chances for the successful working of this type of co-operative organisation are not very great. In India agricultural holdings are notoriously small, and peasants are extremely poor and heavily indebted. Under such conditions partial co-operation cannot succeed. This is well illustrated by the slow growth and comparative failure of co-operative credit movement in the country. Unless we extend co-operation to the main productive activity, it will not be possible to remedy the fundamental weaknesses of our agriculture. Till then the cost of production will remain inordinately high and the realisation of the technical possibilities of increased production only a dream.

Co-opertive collective farming involves renunciation of ownership rights on the part of members. As there is a great attachment to land in the country, the organisation of a society for collective owner-operatorship is not likely to find favour with the peasants in the areas which are already under private occupation. But in case of new lands which are being reclaimed under the various schemes of the Government, there is ample scope for it. In respect of new lands, the land may be divided into blocks of 500 acres or more, depending upon the nature of soil and irrigation facilities available. On each block, a reasonable number of families of refugees, landless labour or ex-servicemen may be settled. The work will be joint and all the property of the farm, including land, cattle, implements, etc., will be owned collectively. If it is found difficult to organise co-operative collectives in case of new lands, efforts may be made to form tenant co-operative society. The society will take land on lease from the Government to be allotted to members in economic sizes. The land will be cultivated by each settler individually. The society can chalk out a plan of cultivation to be followed by the members. It may offer other facilities like marketing, manure, use of machinery, insurance of crops and cattle, but it shall be at the option of the members whether to take advantage of them or not. As in course of time members get trained in the principles of co-opertion and realise its benefits, they may be persuaded to adopt full-fledged joint cultivation.

Though not so easy, co-operative tenant farming society can be formed even in cultivated areas. In those

areas where land owners are absentee landlords or where they are not willing to take part in the cultivation of the land themselves, an attempt should be made to form a tenant farming society comprising the actual tillers. The owners of the land will be paid fair rents, and if considered necessary a portion of the net profits of the society may be given to them by way of inducement. The tenant-members will get the usual wages and also a share in the net profits in proportion to the wages received by them.

As regards the peasants who are neither refugees, nor landless tillers but who are the owners of dwarf holdings, organisation of co-operative joint farming society will be most helpful. It will increase the size of holdings for purposes of cultivation and thereby render large-scale farming possible, without depriving the members of their right to ownership of their individual holdings. The principles of ownership and equal inheritance will be fully respected in this system of farming. But in the interests of farmers themselves, it will be necessary to give a new concept to ownership. When lands are pooled into joint farm managment, ownership will be dissociated from control over the use of the separate bits of land. Then "it will not imply permanent physical possession or an association with specific piece of land, nor will it imply freedom to let that piece of land to a tenant-at-will in return for rent." The owner will simply have the right to receive an income from the farm. He will also have the right to work for which he will be given wages. Thus the income from land will consist of two parts: work income and ownership dividend. A member who also works on the farm will get both ownership-dividend and work-income.

Under this system of joint farming, the principle of equal inheritance, for which there is great attachment, will be equally respected. The sons of the owner, instead of sharing particular bits of land, will share equally the ownership dividend due to their total holding.

In this way we find that co-operative joint-farming offers a concrete and full solution for the fundamental problems of our agriculture. It provides for a re-organisation of our agricultural economy in the shape of an efficient system of production. And at the same time, it is also likely to go down with our peasant community as it makes adequate provision for the ownership and inheritance of land.

VI

Steps to be Taken

It has been shown in the preceding sections that the ultimate solution of the fundamental problems of our agriculture lies in the development of co-operative farming. Its adoption, for which there is a great scope and urgency in the country, will offer to us many benefits in the economic and diverse other spheres. We have cause for satisfaction in so far as the First Five Year Plan of India provides for the same though on a limited scale to start with. As the Planning Commission has put it, "It is important that small and middle farmers, in particular, should be encouraged and assisted to group themselves voluntarily into co-operative farming societies." In the fitness of things, the Plan has taken a wider view of the issue. Suggestions have thus been made for what has been called 'co-operative village management,' the primary object of which is to ensure that land and other resources

are organised and developed from the stand-point of the village community as a whole. Hence, while 'land management legislation was to enable a village community to manage its entire land as if it were a single farm, the actual cultivation could be in family holdings through small groups or through a combination of different methods.' The proposed land reforms organisation is to undertake, among other things, a regular study of the experience of co-operative farming in different parts of the country.

It will be agreed that there is nothing objectionable in the Plan so far as the above propositions are concerned. But we should not be led away to think that the establishment of co-operative farming in the country will be a quick affair. A number of difficulties will have to be faced in achieving the objective, particularly in the initial stages. The farmers in India, for example, are mostly illiterate. Their love for independence and attachment to their particular bits of land are known to be very great. There is also to be found a good deal of social discord and faction in our villages. All these will create considerable difficulties in our way of establishing co-operative farming societies. And then there will be the difficulty of obtaining the requisite amount of managerial skill and technical knowledge in the country for the maintenance and successful working of these societies. The Community Development Programme includes a training programme for village level workers and project supervisors who will mobilise the enthusiasm and co-operation of the people. But this will touch merely the fringe of the problem. The difficulty will thus remain for some time to come.

To meet these and other difficulties in order to

strengthen and promote the development of co-operative farming in the country, we will have to do a number of things. First of all, it will be necessary to undertake schemes for the general and technical education of farmers, so that they may understand the problems connected with co-operative farming and be ultimately able to manage the societies themselves. Till that time at least we will have to provide efficient and trained personnel for giving expert advise and for the supervision and management of co-operative farms. Great care is to be taken in the recruitment and training of the staff to be attached to co-operative farming societies. After the completion of the necessary training, which will be both theoretical and practical, the candidate will be attached to a society as its manager and expert. He will train the members, supervise the working of the society, and assist in its various activities such as crop-planning, processing, marketing, cattle-breeding, organisation of subsidiary industries, etc. All this expense will have to be borne by the Government in initial stages.

Besides this, there will be the need to carry on well planned propaganda on a large-scale among the farmers, explaining to them the benefits of co-operative efforts in the field of farming. The propaganda can be carried on through a number of channels, like exhibitions, leaflets, cinema slides, radio talks, etc. But the most effective method to attract the attention of the farmers and induce them to adopt co-operative farming will be the successful establishment of demonstration co-operative farms. In that case the farmers will be able to see for themselves the great benefits of the new method of production. Surely this

will go a long way in influencing the farmers to change over to the new method. A small beginning may be said to have been made in the form of community projects. If these are implemented properly, surrounding areas will draw a good deal of inspiration from them.

The above measures relating to education, propaganda and the establishment of demonstration farms will considerably help in the progress of co-operative farming But these alone may not furnish enough incentive for voluntary co-operation. Some special inducements or advantages may have to be offered in order to encourage the farmers to try the new method.

These may be :

(*i*) Concessions in land revenue and other taxes.

(*ii*) Provision of finance at a specially low rate of interest, even a State subsidy or loan free of interest.

(*iii*) Supply of tractors and other agricultural implements at concessional rates.

(*iv*) State aid if the crops fail on account of agricultural calamities.

(*v*) Preferential right of acquiring waste lands in a suitable area for growing fodder, pasturage, fruit and fuel.

(*vi*) Preferential right to a suitable area of additional cultivated land that falls vacant.

(*vii*) Special aid by the State for medical, sanitary and educational facilities, construction of roads, wells, etc.

No movement can, however, achieve rapid success unless there is a comprehensive and definite plan and sincere efforts are made to execute it. Hence definite plans need

to be drawn up in each State for the organisation and development of co-operative farming societies. It will be helpful, if in each State a special Board for the development of co-operative farming, consisting of real agricultural experts, is created. It will be the function of the Board to undertake a practical survey and select suitable areas where co-operative farming societies can be established in the first instance. It will prepare plans for the organisation of such societies and suggest to them the steps necessary for overcoming the various obstacles that are likely to come in their way. Thus the Board will not only draw up a plan for the development of a society, but will also watch and supervise its progress.

So the role of the Board in the progress of co-operative farming will be exceedingly important. Much of the success will thus depend upon how the Board is constituted and how it functions. Yet the importance of the full measure of co-operation of the people and of the deep interest by the State can in no case be minimised. Without this co-operative farming will not be able to make any progress in the country.

The Planning Commission has left the issue at a point where some bold guidance is necessary. Thus it has merely expressed the desire that every State should have a programme for the consolidation of holdings and that it should fix a minimum below which sub-division will not be permitted. Surely this will not take us very far.

4307

CHAPTER III
AGRICULTURAL FINANCE

Production requires finance; and in a country like India, where agriculture produces nearly 50% of the national income, agricultural finance must necessarily be a problem of major interest. But it is unfortunate that the subject has not received the share of attention that it deserves, and agricultural finance in India is, to say the least, still a neglected aspect of India's agricultural problems. In this essay, an attempt has been made to critically examine the past and the present position of agricultural finance in India, evaluate its possibilities and put forward suggestions for its future improvement.

I

Rural Indebtedness—the starting point

More than fifty years have passed since the depressing effects of rural indebtedness drew pointed attention to the need for organising the machinery of rural finance more effectively. The Central Banking Enquiry Committee commented very strongly on this issue as well as on the miserably low standard of living of agriculturists in British India. The total agrarian debt was believed to be somewhere near Rs. 1200 crores, whereas the average annual income of a cultivator was estimated at only Rs. 42. It was recognised at that time that a large part of the rural debt was actually inherited from the previous generation. This was quite plausible because Hindu religious sentiments regard ancestral debts as a sacred obligation even when

such debts are legally invalid. It is believed in some quarters that there has been a substantial reduction in rural debts following World War II. Perhaps there is some truth in it. Yet the extent of such reduction must not be taken as of any considerable importance. Further, while it may be true that the debts of large and medium land-holders have been substantially reduced, there is nothing to believe that the same is true of small land-holders, tenants and labourers. The Bombay Provincial Co-operative Institute and Dr. Narainswamy Naidu of Madras also hold similar views.

In any case, the extent of rural indebtedness and its consquences drew pointed attention to the defective organisation of agricultural credit in India. The burden of debts was, so to speak, eating away the very core of agriculture. Transfer of holdings to non-agriculturists swelled the number of landless labourers. Practice of usury among money-lenders, extravagance of ryots on ceremonial occasions like marriage etc., and religious customs requiring large expenditure, sometimes beyond the means of a person, all combined, left very little freedom of action for the cultivators, and very often he was forced into debts without knowing the ultimate consequances. These prompted thinking men to ask for a solution of the problem of rural indebtedness in two directions. The first obvious necessity consisted in devising ways and means for liquidating the existing debt. Secondly, it was necessary to prevent any future tendency towards raising unproductive debts which unfortunately constituted the major part of the existing debt.

The adjustment and liquidation of all debts is considered as an essential preliminary to the organisation of

rural credit on a satisfactory basis. A committee appointed by the Government as early as 1945 proposed compulsory scaling down of debts and their redemption by transfer to land moragage banks, or to similar State-financed institutions. Dr. Naidu of Madras proposed that all debts, except those which can be disposed of with the aid of the Insolvency Law, should be compulsorily ascertained and liquidated by the issue of irredeemable bonds carrying a guaranteed interest of 3½% per annum. These are quite commendable proposals. But they are, on the whole, inopportune. War and post-war inflation may be said to have reduced a large part of the agriculturists' debts and quite a considerable part of the rest really consists of current debts which represent the working capital of farmers. These cannot be liquidated without satisfactory alternative arrangements being made to supply the same. Further, out-right redemption of existing debts will perhaps run into hunderds of crores of rupees which neither the Government, nor any other agency can raise in the present position of the capital market. Issue of irredeemable bonds is not considered feasible because they will, after all, be marketable which means the capital market will be strained beyond all proportions. Scaling down debts, except in emergencies like depression, is likely to destroy that respect for obligations which is necessary in any sound credit system. Thus it would appear that the first necessity is that of building up a satisfactory institutional machinery for rural credit capable of adjusting existing debts as also of supplying normal credit needs of the ryot.

II

Financing Agriculture—its normal requirements

Agriculture, like industry, requires financial assistance both

during the stages of production and trade. During the production stage, finance is required for the purchase of tools, seeds, fertilisers and also for undertaking permanent improvements of land. During the commercial stage, finance is required for the movement and marketing of harvested crops

Further, as in industries, finance required for agricultural purposes may be short, medium and long dated. For instance, loans needed for purchasing seeds and manures, or for harvesting crops, or for paying land revenue are generally short-dated. Such loans are incurred for meeting temporary shortage of funds and are easily paid off with the marketing of crops. But loans may have to be incurred for a longer period when large sums are needed for purchasing tools and implements, or for under-taking minor improvements of land. Such loans are usually medium dated, and the farmers must be given a moderate length of time to pay off his debts. Long-dated loans are usually incurred to undertake permanent improvements in land and must necessarily be of sizeable amount. Generally lands are mortgaged to secure these loans and provisions are made for repayments in easy annual instalments. In the marketing of crops, loans are usually short-dated and are advanced against harvested crops as securities. When the crops are finally disposed of, such loans are easily repaid.

Though agricultural finance has some similarities with industrial finance, yet too much need not be made out of them ; for there are differences, and they are fundamental. "The difference," as has been rightly put, "arises mainly from the inherent characteristics of agriculture which render

the problems of farm credit more complex and difficult than those of industrial finance." These characteristics, briefly put, are three fold. Firstly, agricultural returns, particularly in India, are notoriously uncertain. Farming in our country is practically a gamble in rain-fall, and what is worse, other forces of destruction like floods, cyclones and pests join together in making the return from land still more uncertain. Secondly, agriculture takes a long time to obtain the return and a farmer has to wait for a long period after ploughing the land before he can reap the harvest. This is true of agriculture in general, though in other parts of the world attempts are being made through scientific research to reduce the period of maturity of crops. Double cropping also seeks to reduce the time difference between ploughing the land and reaping the harvests. Thirdly, agriculture, particularly in our country, is quite unorganised. Holdings are small, scattered and uneconomic; cultivation is not based on co-operative principles, and as a result the advantages of superior technical organisation, which other industries enjoy, are absent in the case of agriculture.

For all these reasons, agriculure has not been able to receive the financial help that it needs; for loans can be advanced only when the industry is fairly organised and is in a position to offer acceptable securities. Farmers are not credit worthy; for the securities they offer are unacceptable for ordinary types of bank-advances. Returns from lands are uncertain, and as has been pointed out before, it takes a long time to reap the harvest even when cultivation has begun. Normally, banks are unwilling to make hazardous advances against such uncertain returns, and

are even conventionally precluded from making advances against such doubtful securities. As the Statutory Report of the Reserve Bank of India rightly observes, "Apart from the special risks involved in agricultural finance, the main difficulty arises from the fact that in India the majority of the agricultural population consists of small peasants with whom agriculture is not so much a profession as a mode of living." In other words, loans can be advanced only against securities in organised markets and not to individuals whose mode of living is basically precarious. No wonder, agriculture in India, throughout the last decades has failed to attract sufficient finance; and for chronic want of resources, it has been constrained to lead a very precarious existence.

III

Sources of Farm Finance

Such a condition needs proper remedies, and attempts must be made to improve and revitalise the conditions of agricultural finance in the country. But before the task is undertaken, and courses of action suggested for the future, it will be useful to have a brief discussion of the methods of agricultural finance prevalent in the past.

The traditional source from where the farmers in India used to get their financial help was the village money-lender —a very elastic term which included all classes of people, big or small, who used to do money-lending business. Village money-lenders not only meant big and famous houses, more commonly known as 'indigenous bankers', big land-lords and talukdars, rich and well-to-do peasants, but also petty pawn-brokers, including even the roving Pathans, euphemistically called mobile banks. There was no

uniformity in the methods of their transactions. Ordinary money-lenders were rather informal and sometimes did not have even any proper accounts. The relationship between the village money-lender and the farmer-borrower was frankly and intimately personal. But the rich lenders and the famous houses of indigenous bankers were formal in their transactions; they not only kept proper accounts, but also maintained offices and observed regular hours of work.

In our own times, money-lenders have come in for a lot of criticism. They conjure up in our vision the picture of a Shylock who is always out to exact his pound of flesh. Indeed, on occasions their behaviour has been worse than a Shylock. The rate of interest charged by them has been fantastically high, and there are innumerable cases where farmers have been literally ruined because of the high interest charged for the loans given. Besides, money-lenders are also known to have deliberately tampered with accounts, and thus mercilessly exploited the ignorance and illiteracy of the farmers. The Banking Enquiry Commission of 1931 records a case where a farmer borrowing Rs. 100/- had paid Rs. 1000/-as interest, and yet the debt was supposed to be still standing.

This, indeed, is a "dark picture. But yet in fairness, the other side of it should also be stated with equal emphasis. We have seen that farmers need financial help, and in the absence of any organised institution for giving them this help, the money-lenders have filled up the gap, and have played an important role in extending financial help when agricultural badly needed it. That way, the services of the money-lenders have have been quite

inestimable, and villagers have found in the money-lenders not only a helping hand, but also their friend and guide.

Perhaps this may sound an exaggerated statement of facts ; but a closer examination would show that this is not so. It should be remembered that financial loans, to be of any real service, should have the following characteristics. Firstly, loans should be elastic ; secondly, they should be prompt ; and thirdly, they should be sufficient. A little explanation will make the importance of the characteristics clear.

By elasticity of loans is meant that they should be made available in amount, large or small, as conditions demand. It is not that farmers require day-to-day finance for agricultural purposes. They require loans to buy seeds and manures before cultivation begins. Again, they require loans before the harvesting period when their income is lean. Further, the amount of loans needed are not the same throughout the year. Before the marketing of crops, loans needed are greater than in the early stages of cultivation. In each period, farmers should be assured of a supply of funds that they might require. By promptness is meant that help given should be quick and ready. Help delayed is help lost, and in the case of farmers this is more so when they have no reserve to fall upon, and delayed financial help might mean for them an incalculable loss. Loans should also be sufficient for the purpose which is required to be met. If large expenditure has to be incurred for tools and capital instruments, or for making improvements in land, then insufficient help is worse than nothing. Hence the need for sufficiency.

For giving ready and sufficient loans, village money-lenders have been an unique institution. Though a great part of their money has been lent for undesirable motives and for unproductive purposes, yet there is no denying the fact that an important part of money-lenders' activities has been canalised in the right direction, and money has flown into that sector of the rural economy where it has been most needed.

The Money Lenders Act of 1940 and the Agricultural Debtors' Act in various provinces have, within recent times, seriously contracted the money-lenders' business. The licensing of the profession, various laws relating to audit and inspection have certainly gone a long way in removing the malpractices of the money-lenders; but at the same time, by curtailing their activities, these laws have acted to the detriment of the interests of the farmers. Agriculturists do not get as much financial help as they used to, and the present task, therefore, centres round establishing alternative agencies which would be able to cater to the requirements of the peasants.

As an alternative source for the supply of agricultural finance, development of village co-operative societies holds out excellent possibilities. But unfortunately, for various reasons, the progress in this line has not been as satisfactory as it should have been, nor as rapid as it was considered desirable. According to the latest Bulletin of the Reserve Bank of India "farm credit by co-operative banks has touched only a fringe of our population, as the total membership of co-operative banks covers only 1½ per cent of the rural population." It is now exactly half a century, (for the first co-operative society was started in 1901) that

the co-operative movement was initiated in this country, and it is some what disappointing to reflect that after all these years, the movement has not to its credit anything better than this record. Obviously, the co-operative societies have failed to fill the gap in the methods of agricultural finance in India, and have in no way proved a substitute for the money-lenders.

But apart from the fact that the growth of co-operative societies has not been commensurate with India's total requirements, another regrettable feature is that even the existing societies are not functioning properly. In fact, "One third of the societies are in a moribund state, either because they are not functioning properly, or on the verge of liquidation. Thus they are classified as D or E societies." If these societies are left out of account, then for all practical purposes co-operative societies do not meet the requirements of even one per cent of the rural population.

Whatever may be the ideals of co-operative societies, in practice too many difficulties have been experienced to make them really popular and useful institutions. It has been mentioned before that farm loans, to be really useful, should be elastic, prompt and sufficient. Co-operative credit does not possess these characteristics ; at least there is no mechanism by which these qualities can be assured. In fact, in practice what has happened is that co-operative loans have proved inelastic, insufficient and slow in execution. The reasons are not far to seek. As has been pointed out before, financial requirements of farmers may be different at different times ; at times more money may be required, at times less. But there is no guarantee that co-operative societies will be in a position to supply

more finance when demand increases. In fact, co-operative societies have always pleaded helplessness when more money is needed, and have bitterly complained of monetary stringency and shortage of funds. On the other hand, when demand is slack, societies have been in possession of surplus funds which could not be put to productive uses. Further, because of monetary stringency, co-operative credit has never been sufficient, and owing to certain official formalities, loans have also never been promptly given. It is not, therefore, surprising that co-operative credit has never been able to catch the imagination of the rural people, and evoke the amount of enthusiasm that was originally expected.

In practice, a few more defects in the working of co-operative societies have been noticed. Co-operative ideals require a certain amount of education, understanding and integrity of character which are sadly lacking in the rural population. At present, the amount of outstanding loans are Rs. 2562 lakhs, and of these Rs. 418 lakhs are over-due. This indeed is deplorable, for co-operative societies can work only on the willing co-operation of the workers, and over-due loans, which should have been paid earlier, only hamper their normal activities. Again, in co-operative societies, some of the fundamental rules have more frequently been violated rather than observed. For instance, on numerous occasions the societies are known to have given loans for unproductive purposes, though it is a basic principle of co-operative credit that loans should be given only for productive purposes. Further, dishonest practices such as tampering with accounts, issue of loans against fictitious names are also not uncommon.

Summing up, the broad position of the co-operative societies in India is that "existing resources and credit facilities of the co-operative institutions are no longer adequate to the growing and various needs of the farmers." To be successful agencies for farm credit, co-operative societies must be imbibed with a new vigour, so that they may prove a really beneficient institution for the all-round development of Indian agriculture. But to achieve these objectives, a planned reform and re-organisation would be essential.

Another method of agricultural finance, though not much known, is what is called government loans. "Government supplies finance to agriculturists through *taccavi* loans. The smallness of the amount advanced by it, when compared with the total finance required by agriculture, has been due to the fact that the loans under the Agriculturists Loans Act have mostly been advanced to enable the agriculturist to tide over emergencies and have not been intended to supply his normal finance." By its very nature, *taccavi* loan "is unsuitable to serve as the normal and regular source of farm credit", for government help will be given only in cases of emergencies and not for meeting normal requirements. Besides, the government rules are so rigid, and the administrative machinery so slow to move, that for all practical purposes, benefit received on this account has been quite negligible.

Lastly, there remains the consideration of commercial banks as a source of agricultural finance in India. By their very nature, commercial banks are precluded from making any long-term advance, or advance against landed securities. The only alternative left for commercial banks is to make

short-term advances against farm produce during seasonal movements and marketing of crops. As a matter of fact, commercial banks, by making short-term advances during seasonal movements and marketing of crops, have come to play an increasingly important role, in agricultural finance in India.

But even then, it should be remembered that commercial banks have no direct connection with the farmers, and the help extended is only round-about in method. The real position is that it is the indigenous bankers who make initial advances, and when they are short of funds, they go to the commercial banks for further accommodation. To recognised indigenous bankers and brokers, accommodation is rarely refused, if proper securities are offered. In some cases, *Hundis* of established indigenous bankers are accepted by commercial banks for re-discount, and thus funds are released for financing the movements of crops. Only in South India commercial banks are known to have direct connections with the farmers, and loans are given to them against their farm produce as securities.

Any way, too much need not be made of the facilities given by the commercial banks for agricultural finance. There is a general feeling that banks could do more, but that they are unwilling to do what they could possibly do. The truth is that commercial banks could possibly play a little more active part in agricultural finance, but under existing conditions, they cannot extend their activities without incurring great risks. If commercial banks are to extend a more liberal help, then conditions should be created in which the banks might find themselves in a position to do so. For this purpose, it is, therefore,

essential that the market for *Hundis* should be organised and regulated, so that the banks may find it both safer and more profitable to make advances against those securities. Further, as in organised share markets, the brokers should be licensed, and illegal practices thoroughly prohibited. The use of standard weights and measures, construction of ware-houses, provisions for storage of crops, introduction of grading and standardisation of staples should be other essential measures which must be completed before the commercial banks can be expected to take a more active part in financing the movement and marketing of crops.

IV

The Reserve Bank and the Present Position

With the establishment of the Reserve Bank of India, it was hoped that the agricultural finance would receive a new fillip, and adequate steps would be taken to rehabilitate and improve the financial position of the farmers. A review of the working of the Reserve Bank during the past few years would, therefore, be useful.

The Reserve Bank of India maintains an Agricultural Credit Department for the investigation and study of the various aspects of agricultural credit. The Department had recently undertaken a study of the position of the co-operative societies and has rendered useful service by bringing out a publication on the subject.

But apart from such objective and factual studies, the actual service rendered by the Reserve Bank for improving the condition of agricultural finance has not been up to popular expectations. Under provisions of its own constitution, the Bank cannot make advances to farmers direct. It can give accommodation only through scheduled banks,

or provincial co-operative banks. Naturally, the amount of help given is limited, for the extent of accommodation given depends on the capacity of the scheduled and provincial co-operative banks to borrow. The conditions under which Reserve Bank loans can be given to other banks are fairly stringent. The banks must have a minimum cash balance, sound bank practices and be able to offer approved securities. Such stipulations are resented by the scheduled banks and the public as being too stringent to be of any practical use. The scheduled banks have pointed out that if their conditions were sound, then why would they have at all required any outside help? But on the other hand, the Reserve Bank, with equal pointedness, has argued that unless the position of banks were sound, how could any advance be made? The dispute is obviously moving in a vicious circle – and in new reforms, which seem to be urgently called for, arrangements must be made to promote better understanding between the parties concerned. Further, the Reserve Bank is not entitled to give loans longer than 90 days, and is thus unable to finance long-term requirements of the farmers. The position, therefore, is that the Reserve bank does not and possibly cannot finance the day-to-day requirements of the farmers, nor does it finance their long-term requirements. It is practically playing the role of a glorified commercial bank, standing aloof from the market, and giving help only when occasion arises through the commercial and provincial co-operative banks, and that too under so many limiting conditions. No wonder that the Reserve Bank has come in for a lot of criticism for its having failed to reorganise agricultural credit. The Reserve Bank has not acted with imagination and has failed to arouse popular enthusiasm.

Summing up, it would appear that the agricultural credit in India is in a state of mess, and is not functioning in an organised fashion. The farmers require short, medium, and long term loans for productive purposes, but the institutions which meet these requirements are doing so only in a piece-meal fashion. The money-lenders still play the most important role as an agency for rural finance, even though the scope of their activities has been greatly curtailed by recent legislations. Co-operative societies are in a very moribund condition, and their activities do not touch even 1% of the rural population. The commercial banks advance only short term finance through the limited number of indigenous bankers who are able to approach and maintain connections with commercial banks. The Reserve Bank, as we have seen, gives only limited help through the scheduled banks and provincial co-operative banks.

Apart from the limited amount of finance which these institutions are able to supply, another grave defect is that the activities of these agencies are unco-ordinated and are, therefore, not all inter-related. In other words, the market for agricultural finance is entirely unorganised. There is no formal connection between the activities of the money-lenders and the co-operative societies. Again, both money-lenders and co-operative societies lie outside the pale of the organised money market which includes commercial banks and the Reserve Bank. This sharp division of the agricultural finance market—one urban and organised, and the other rural and unorganised—has created a schism which aggravates, rather than solves the problems of rural finance in India. What is really wanted is a net work of organisation

which will connect the rural agencies with the highest financial institution and thus bring agricultural finance within the fold of organised money market.

V

The Need for Reconstruction

In this connection, it will be useful to have a brief review of the methods of agricultural finance as prevalent in other countries. "The U.K., U.S.A., Eire, Canada, Australia, New Zealand, South Africa, Egypt and Ceylon have central institutions for granting farm credit and these are either State-owned or State-controlled. They grant all types of loans, short-term, medium-term, and long-term. In America the Production Credit Corporation which has a capital of 120 million dollars has thoroughly solved the problem of giving short-term loans. The long term loans, extending even up to 20 years, are given by the Federal Land Bank. The initiative for solving difficulties of rural finance was taken up as early as in 1916 when the Farm Loan Act was passed. The Act was intended to "provide capital for agricultural production, to create a standard form of investment based upon farm mortgages and to lower and equalise rates of interest upon farm loans."

It is not that similar attempts have not been made in India. The history of Indian land mortgage banks is there to provide evidence of what could be done in one or two provinces at least, if not in all provinces. In fact the experiment in Madras and Bombay in this respect proved quite successful in a large measure. Of these two provinces again, perhaps Madras achieved greater success and to-day it serves as a model for other provinces and states in India. This could be possible only because State assistance was forthcoming

to ensure successful working. Nevertheless, on the whole, land mortgage banking did not progress outside the two provinces due largely to the absence of proper guidance and assistance. Perhaps a happy sign in this context is a recent move on the part of the Reserve Bank of India with its desire to purchase the debentures of mortgage banks and its readiness to make available such technical advice and assistance on the issue and redemption of debentures as may be required by the banks.

In India, there is a feeling that the State should take initiative in solving the very urgent problem of rural finance. To be more precise, a State-owned institution like Agricultural Finance Corporation, on the model of Industrial Finance Corporation, might be set up to look into the needs of the farmers, and eventually to organise the various agencies which cater to their requirements. Actually a concrete proposal in this regard was made as early as 1945. The proposal was to have autonomous institutions in every State which might be called Agricultural Credit Corporations. The State was to contribute half of their capital, and joint-stock banks, co-operative institutions, marketing organisations etc., the rest. Their functions would be (i) to establish agencies and branches all over their respective regions, and (ii) to supply all types of credit. Thus they would supply finance to co-operative societies where central financing agencies are absent, and also supply mortgage loans directly to individual agriculturists. Obviously, the activities of such corporations will have to be co-ordinated with those of co-operative and other institutions, and competition will have to be scrupulously avoided. In fact, short and medium-term credit based generally on personal

security or statutory first charge on crops can only be provided through co-operative societies. While institutions modelled as above would be welcome, the scope of rural banking should also be extended to make it possible for farmers to borrow for productive purposes. The State would do well to start on its own initiative such banks in the rural areas.

In this connection, it is important to mention that the Rural Banking Enquiry Commission, which submitted its report in 1950, failed to satisfy the public expectations on the issue of agricultural finance. According to the findings of the Commission, the primary object of extension of banking facilities in rural areas is to mobilise rural savings for anti-inflationary purpose, and not for solving the problem of agricultural finance. This is frankly disappointing, and the Commission further adds that the problem of rural finance is a long standing problem and hence requires time, efforts and long-term plans for a successful solution. These are certainly words of wisdom, but of very little consolation.

To conclude this rather lengthy article, it would appear that two things should be done to solve the problem of rural finance. Firstly the various agencies of rural finance should be integrated, and secondly, the scope of their activities should be greatly extended. For these two-fold purposes, it is essential to undertake the following steps :—

(1) To establish an Agricultural Finance Corporation.

(2) To extend the scope of the Reserve Bank of India for giving a more liberal help.

(3) To improve the moribund condition of the co-operative credit societies and to establish new ones.

(4) To rehabilitate the position of indigenous bankers and money-lenders and bring them within the fold of organised money market.

(5) To set up licensed ware-houses, offer storage-facilities, introduce uniform measures and weights to improve market facilities. This will enable commercial banks to extend liberal loans for financing movements and marketing of crops.

(6) To make ware-house receipts negotiable so that they may be used as securities for bank accommodation.

(7) To extend rural banking facilities not simply for anti-inflationary purpose, but also for improving agricultural finance.

(8) To mobilise rural savings for solving the problem of rural finance, and not for diverting them for use in industries.

It is essential that the welfare state in India should pay its attention in these directions and bring substantial improvements in the condition of Indian agricultural finance. The Five Year Plan has provided for a total sum of Rs. 100 crores per annum to be made available for the short-term requirements of the cultivators through the co-operative movement and loans from the Government. There is provision for medium term finance to the extent of Rs. 25 crores per annum, while for long term loans the amount earmarked is Rs. 5 crores. Despite its frank admission that 'agricultural production suffers considerably

for lack of adequate finance,' the Plan, it would appear, has left much to be done to bridge the gap between practice and precept. The sums provided for are far too inadequate in view of the enormous needs to be satisfied. Let us hope that the eight-point suggestion outlined above will now receive due consideration at the hands of the Government.

———

CHAPTER IV

MULTI-PURPOSE RIVER PROJECTS

Necessity of Regulating Water Supply

Inadequate and uncertain supply of water is one of the most important causes responsible for the low productivity of agriculture in India. The Indian peasant depends primarily on rainfall for the supply of water to his land. But rainfall in India is neither equally distributed over the different parts of the country, nor does it come regularly so as to ensure successful cultivation. The average rainfall over the country, as a whole, is about 45 inches per annum ; but there are considerable variations in the amount received in different regions. On the one extreme is Chirrapunji in the Assam Hills which receives the highest amount of rainfall in the world (about 460 inches annually) and on the other, there are parts of the Rajasthan Union and the Punjab which hardly receive three to five inches of rainfall. In such areas of scanty rainfall, cultivation is almost impossible unless facilities for artificial irrigation are made available.

The uncertain character of rainfall is, however, more harmful to agriculture than its unequal distribution. Not infrequently, the rains fail and cause extensive damage to crops and financial loss to cultivators. The recurring famines, so characteristic of the 19th century, have been the direct outcome of the failure of rains. Besides the danger that the rains may not come at all in a particular year,

there is also the risk that they may not arrive at the right moment. Sometimes rains come too early, sometimes too late. Similarly, the amount of rainfall received in different parts varies from year to year. It is very seldom in India that rains correspond to the requirements of agriculture, both in their timing and quantity. In case they come earlier than required, the peasant cannot take advantage of them, because by the time the ploughing season comes, the land becomes dry once again. On the other hand, if they are late, agricultural operations are delayed. Again, too little rainfall prevents germination, while too much of it causes floods, destroys crops, and results in a huge loss of life and property.

These uncertainties and abnormalities of rainfall have catastrophic consquences for a predominently agricultural country like India. The tragedy is that they, in India, are the general rule, rather than the exception, so that the harm caused by them is a normal feature of Indian life. Every year one part of the country or the other has to suffer on account of the vagaries of Nature. If we want to avert this regular suffering, the horrible dependence of agriculture on the bounty of Nature must be avoided. The farmer must be supplied with adequate quantities of water and at times when he needs it. Then alone can he carry on the agricultural operations successfully, develop the land he cultivates and raise its productivity. All talk of agricultural development or progress, on which the future prosperity of the country depends, is meaningless so long as the country is dependent on rainfall for irrigating land. Artificial irrigation facilities must, therefore, be developed to ensure a regular supply of water for agriculture.

Just as there is the necessity of guarding ourselves against the miserliness of Nature, similarly we must protect ourselves against its becoming too benign and bountiful. As has been pointed out above, whenever rainfall is excessive, it causes floods. The rivers that overflow in the rainy season are responsible for a great deal of devastation all over the areas through which they pass. Standing crops are washed away, villages and towns near the rivers are destroyed, hundreds of people are either drowned, or are swept away by the flooded rivers. The economic life of the flood-affected areas is completely upset. The State has to incur huge expenditure on flood relief measures; land revenue is often remitted to alleviate the sufferings of the peasants, and thus the State revenues are considerably reduced. Since these floods occur almost every year in some part of India or the other, the country never recovers from their disastrous effects. The problem facing India, thus, is not merely one of supplying water to land for purposes of irrigation, but also that of so controlling and regulating the water in her rivers as to prevent it from doing harm to the people.

Potentialities of Indian Rivers

Indian agriculture suffers from the paucity of water. But it is so, not because there is any scarcity of water in India. The real cause is that the available water resources have not been harnessed to supply water to the water-thirsty fields. According to a very rough estimate, every year 1356 million acre feet of water flow out of the Indian rivers into the sea. At present, only 76 million acre feet, or 5·6 per cent of this available water supply are being utilized for purposes of irrigation. The remaining 94·4 per cent,

not only do not contribute any thing to the country's wealth, but, on the other hand, cause a great deal of misery to the people as they flow into the sea. If the entire available water resources, or even a major part of them, are properly harnessed, the country can provide irrigation to the bulk of its land, and thus increase agricultural productivity to a very large extent.

The Indian rivers are not merely capable of irrigating land, they can also yield various other advantages. No concerted efforts have yet been made to explore the potentialities of India's large number of rivers. According to the estimates available at the moment, the water in the Indian rivers can be used to generate 33 to 40 million kilowatts of electric energy. The power potential of India's resources is second only to that of the U.S.S.R. If all the available resources are fully tapped, the country can generate sufficient electricity for domestic and production purposes. Besides, if properly developed, some of the rivers can be used for purposes of navigation. In addition to these direct benefits, the country will also gain not inconsiderably from the elimination of floods, rendered possible through the control of rivers.

Present Utilization of Water Resources

Though irrigation by means of canals was not unknown in India in the past, consistent efforts for canal development began to be made only under the British rule towards the end of the 19th century. The Famine Enquiry Commissions, one after the other, emphasised the need for the development of canal irrigation for the purpose of averting famines in the country. The Government undertook canal construction to provide adequate water for agricultural

production. Considerable extension in the area under irrigation took place during the British rule in India. The irrigation canals in the Punjab and Sind transformed the character of agriculture in these two provinces. They soon became the granaries of India. Yet, the tempo of canal development was not so high as it should have been in view of the importance of irrigation for the country's prosperity. The total irrigated area in the undivided India amounted to 70·7 million acres in 1945—46, which was only 24·5 per cent of the net area sown. Of this, only 32 million acres, or nearly 45·5 per cent of the total irrigated area, were accounted for by canals, the rest being irrigated by wells, tanks and other sources. Inspite of their inadequacy, the canals did make valuable contribution to India's wealth. They reduced, to some extent, the country's dependence on rainfall and thus made agriculture more productive in areas served by them

The partitioning of the country in 1947 affected us adversely in the field of irrigation. As a result of it, India has been left with only 48 million acres of irrigated area, reducing the percentage of the irrigated area to the net area sown to 19. Bulk of this area is irrigated by means other than canals. The latter irrigate hardly 18·5 million acres as against 15 and 8 million acres by wells and tanks respectively. The rest of the area is irrigated through various other means. Thus it is abundantly clear that, at present, canals make a very small contribution to India's total irrigated area. Our vast river resources remain unexploited.

Besides for the purpose of irrigation, our rivers have been used for the generation of electricity. But in this case,

too, not even a small fraction of the total available resources has been put to use. As against the total known water power potential of 30 to 40 million kilowatts, just half a million kilowatts of hydro-electric power are being generated. The *per capita* consumption of electric energy is extremely low, nearly 110 killowatt hours. There is thus an immense scope for the development of power resources in the country.

Idea of Multi-Purpose Projects

From the above review, it is quite obvious that there is a great necessity and scope for exploiting the country's water resources for providing irrigation facilities to agriculture and for generating electric energy. Further, the rivers must be controlled so that the recurrence of floods is avoided and the country is protected from their ravages.

Hitherto, in India, emphasis has been laid mainly on the utilization of river-water for purposes of irrigation and power production, and these two objects have been sought to be achieved separately. We have either the irrigation projects, or the hydro-electricity projects alone. Seldom does a project combine these two objects. As for the control of rivers to prevent devastation through floods, little effort was made in the past. It is only after the highly damaging floods in the river Damodar in the year 1943 that the problem of flood control began to receive attention. Since then certain schemes have been prepared and some of them have actually been put into execution which combine in themselves the dual object of utilization of river waters and the control of floods.

These schemes have been given the name of Multi-Purpose Projects, as they are designed to achieve more

than one object. It is proposed, through the implementation of these schemes, to generate electricity, to irrigate land, and to control floods. Some of them aim at the development of navigation facilities also. When these schemes are fully executed, it is expected that not only will the Indian rivers cease to be harmful, they will actually contribute enormously to the economic development of India.

The T.V.A.

The interest in the multi-purpose river projects was stimulated by the T.V A.—Tennesse Valley Authority—experiment in the U.S.A. The river Tennesse often used to cause great disaster to the people living in its valley, and consequently the entire valley was almost unpopulated and nothing was produced there. The Government of the U.S.A. decided to control this river and develop the Tennesse Valley. For this purpose, an authority known by the name of Tennesse Valley Authority was created to which the entire task of prevention of floods and utilisation of the water of the river for productive purposes was entrusted. The T. V. A., working under Dr. Arthur E. Morgan and later under Mr. David E. Lilienthal, achieved marvellous results. Through extensive works of river training and the construction of large dams, the floods have been prevented. The water of the river has been harnessed for irrigating land in the Tennessee Valley and for generating electricity on which the industrialisation of the region has been based. The Tennesse Valley, which at one time was one of the most deserted and uninhabited areas of the U. S A., is now quite populous and produces a large wealth of agticultural and industrial commodities.

The Projects in India

India, faced with problems similar to those faced by the U.S.A. at one time, was naturally attracted by the T.V.A. experiment. After the floods of 1943 in the river Damodar, it was decided to follow the example of the U.S.A. Accordingly, there has been set up the Damodar Valley Corporation on the lines of the T.V.A. to control the river Damodar and to develop the area through which it passes.

The Damodar project is not a solitary case. Many other rivers, like, for example, Kosi, are in spate almost every year and cause huge destruction. Schemes have been prepared to control and utilize them in the same way as in the case of the Damodar. At present there are 257 river projects of all kinds which are at different stages of planning and execution in the hands of the Central and State Governments. All of them, however, are not multi-purpose. Some are designed to fulfil only one of the various purposes given above ; but most of them aim at the achievement of more than one object. On the basis of sanctioned estimates, the projects which are now at different stages of execution, are likely to cost Rs. 765 crores in all. Of this Rs. 153 crores are known to have been spent upto the end of March 1951. On completion these will irrigate an additional area of 16·9 million acres and generate about 1·46 million kilowatts of power.

The Plan and Expected Results

The Five Year Plan has provided for a total expenditure of Rs. 518 crores on the river valley projects which have been commenced and are under execution. In addition Rs. 40 crores will be spent on new schemes considered to

be essential for development of particular areas. The total expenditure on the new schemes will amount to well over Rs. 200 crores. Since work on these schemes is yet to start, the amount sanctioned for expenditure during the period of the Plan has been fixed at Rs. 40 crores. The projects already under execution are expected to bring under irrigation an additional area of 8·5 million acres by the end of 1955-56. Besides they will also generate, according to official estimates, about 1·08 million kilowatts of power by the same date. The following is a tabular representation showing the annual expenditure and the likely benefits from these projects year by year.

Year	Expenditure (Rs. crores)	Additional irriga-tion (acres)	Additional Power (Kw.)
1951-52	85	646,000	58,000
'52-53	121	1,890,000	239,000
'53-54	127	3,555,000	724,000
'54-55	107	5,749,000	875,000
'55-56	78	8,533,000	1,082,000
Ultimate		16,942,000	1,465,000

The new schemes incorporated in the Plan are the Kosi (Bihar and Nepal), Koyna (Bombay), Krishna (Madras and Hyderabad), Chambal (M.B. and Rajasthan) and the Rihand (U.P.)

Though it is not possible to describe here all the projects in hand, a brief review of some of the major ones may, however, be given.

The Damodar Valley Project

This project covers parts of the two States of Bihar and West Bengal. Its total cost is estimated now at about Rs. 90 crores. 'The project, in brief, is to control the

Damodar by impounding its flood waters in a series of reservoirs through damming the main river and its tributaries, so as to prevent floods in the lower valley and gradually to release the water from the reservoirs for producing hydro-electric power, irrigating over one million acres of land and facilitating navigation to and from Calcutta.' In concrete terms, when fully completed the project is expected to irrigate 1 million acres of land, yield 370,000 tons of additional food grains, and 300,000 kilowatts of additional power.

The execution of Damodar Valley Project has been entrusted to an autonomous corporation, called the Damodar Valley Corporation which was constituted under the Damodar Valley Corporation Act of 1948. The Government of Bihar and West Bengal as well as the Government of India are represented on the Corporation.

The project is financed jointly by the Central and the two State Governments. On account of the shortage of funds, the World Bank was approached for loan on two occasions. In April, 1950 a loan of 18·5 million dollars was made for a steam power plant at Bokaro, a transmission system and a storage dam at Konar. In January this year (1953) the Bank granted a further loan of 19·5 million dollars to be used for a second group of projects within the programme.

The Bhakra and Nangal Projects

These projects will benefit the States of the Punjab, PEPSU and Bikaner. It is proposed to construct a weir at Nangal and a large dam across the river Sutlej at Bhakra to use the water for providing irrigation and generating

power. Electricity from Nangal was promised by the middle of 1953 but the date has been postponed by about a year. The estimated cost of the projects approved and sanctioned by the Planning Commission is Rs. 140 crores. On completion these will result in an increase of about 4 million acres of land under irrigation, 8 lakh tons of food grains and more than 160,000 kilowatts of hydro-electricity. Besides, a huge increase in the production of long-staple cotton, so badly needed by the cotton textile industry, is also expected.

In 1951, a Board, called the Bhakra Control Board, was set up composing the representatives of the three State Governments and the Central Government. Its primary task was to supervise the work on the project which is urgently ealled for on account of the very slow progress of the scheme in its earlier stages.

The Hirakud Dam Project

This project is one of the three schemes for the development of the Mahanadi Valley. The other two are the Tikarpara Dam Project and the Naraj Dam Project. It is estimated that the waters of Mahanadi, if fully utilised, can irrigate 20 million acres of land (if that much land is available) and generate 4 million kilowatts of electricity (which is thrice the total power developed at the 26 dams of the T.V.A). In addition to this, it can provide navigable waterway with a minimum draught of 9 to 10 feet, extending 380 miles from the border of Madhya Pradesh to the sea. The Hirakud Project is being executed directly by the Central Government and is estimated to cost Rs. 92·08 crores.

The project, it is reported, will be ready by the middle of 1955 to supply 24,000 K. W. of electricity, which will be stepped up to a firm capacity 85,000 K. W. and still further

as demand increases. By 1954-55 it is expected to provide irrigation to 1,347,000 acres of land. Besides providing protective irrigation to the existing irrigated areas in the delta during the critical periods of short supply, it will also enable perennial irrigation to be extended to other large areas in the delta. The net increase in food production is expected to be 340,000 tons.

Besides the above mentioned three biggest multi-purpose projects, reference might be made of a few others. Below are given the names of other major projects with their expected costs and the areas that will be benefited by each one of them.

Name of the Project	Estimated Cost (Rs. crores)	Areas to be Benefited
Kosi	66	Bihar and Nepal
Koyna	33	Bombay
Krishna	N.A..	Madras and Hyderabad
Chambal	33	Madhya Bharat and Rajasthan
Rihand	35	Uttar Pradesh
Mor	15·5	West Bengal
Tunga Bhadra	70	Madras and Hyderabad
Kakarpara	12	Bombay
	12·63	Madhya Bharat (electricity)
Mach Kurd	17	Madras and Orissa
Harike	18·8	Punjab
Sarda Power House	11·21	U. P.
Lakkarvalli	18	Mysore

Indian Economy after their completion

With the completion of all the projects, it may well be expected that the character of the Indian economy will be

remarkably changed. Many hurdles in the way of the country's economic development will be eliminated. By providing canal and lift irrigation to vast tracts of land all over the country, they will rid the Indian agriculture of the curse of Nature. The regular and adequate supply of water will certainly increase the productivity of land and thus break the hard crust of poverty of the Indian agriculture. The bringing of new areas under cultivation, and the provision of irrigation to the old ones will considerably help the mechanization of agriculture. The net result will be self-sufficiency in food and other agricultural raw-materials for which India depends at present on foreign countries. The agricultural economy, which is a deficit economy at present, may fairly be expected to become, if not surplus, at least self-sufficient.

The change in the character of the agricultural economy cannot but affect the trade and industry of the country. With self-sufficiency in food and important agricultural raw materials, their importance in the import trade will decline and thus the present tendency of our balance of payments to be unfavourable will be checked.

Again, the pace of industrial development can also be expected to be quickened by the availability of abundant and cheap power and sufficient raw-materials. The electrification of the country can be relied upon to help in bringing about a more balanced and equitable distribution of industries. It will check the tendency towards centralization of productive enterprises in a few places which, in no small measure, was due to the advantages such places had in the availability of cheap motive power. The

supply of power at a low price all over the country will make it possible to bring about a more decentralised pattern of industrial organisation capable of absorbing the huge mass of people in the rural areas who are at present a burden on the limited land resources. This will yield very important benefits. By removing under-employment, so characteristic of our rural economy, and by increasing the productivity of agriculture (through a reduction in the burden on land), it will lead to greater prosperity of the people as a whole. The standard of living will thus appreciably rise.

Besides leading to greater agricultural and industrial output, the completion of the multi-purpose projects will lead to many other advantages. There will be a considerable expansion of secondary and tertiary occupations, like manufacture, trade, transport, banking, etc. The occupational structure will become more broad-based and balanced. The State revenues will surely increase by this all-round improvement. It will then become possible for the State to provide social services, like health, education etc. on a more extensive scale.

The Planning Commission has drawn pointed attention to many irrigation and power projects besides those included in the Plan. These have been or are being taken up for investigation, the aggregate cost of which is calculated to be about Rs. 2,000 crores. On their completion in 15 to 20 years time, the irrigated area is expected to be doubled and 7 million kilowatts of electricity are likely to be generated. The magnitude of the task lying ahead will be very clear from these estimates.

Financing of Projects

The projects under execution may be divided into three categories, depending on their financing either by the Central or State Governments, viz., (1) projects financed wholly from loans advanced by the Union Government, (*ii*) those financed by the State Governments and (*iii*) those financed by State Governments with the help of Central loans. Betterment levies, higher water-rates and agricultural income tax, if not already introduced, have been recommended by the Plan as the most effective sources of finance which State Governments may tap. Some of the States have also accepted the proposal to create a non-lapsable irrigation and power development 'ways and means' fund. The economic and financial implications of a number of projects in regard to the various groups of connected works involved in them are yet to be investigated into, and the Plan has made provisions for such modification of scope of the projects or of portions of projects which might be considered necessary.

Progress and Bottlenecks

In so far as the future prosperity of India is greatly dependent on the successful completion of river valley projects, it is of utmost importance that these projects should be executed within the shortest possible time. Further, "when a development project is spread over a long period, there is heavy accumulation of interest on the invested capital before the scheme becomes productive of wealth and revenue. Tihs swells the total cost and to that extent strains the financial resources of the country." Unfortunately, the progress so far has been rather slow. Inspite

of their great enthusiasm, the Government have not found it possible to go ahead with the execution of these projects at full speed. There are many reasons which explain the inability of the Government to achieve their desired objective. Two such causes, which have become very conspicuous, are the non-availability of sufficient funds and the lack of technical personnel. Due to the continuous financial difficulties of the Government, work in several projects has had to be be suspended, and in others slowed down, with the result that targets laid down for achievements have had to be frequently revised. At the top of all, the estimated costs of major projects have had several upward revisions which caused further delay in their adjustment in the over-all set up. Similarly, the dearth of qualified and experienced technicians has also prevented the work on the river projects proceeding according to schedule.

Besides these two hurdles in the way of development, certain other difficulties have also been experienced. For example, the materials such as steel and cement and the necessary machinery are not available in the quantities required, The domestic production is not sufficient to meet the entire demand. The balance of payments difficulties and international factors have made imports of essential materials difficult. Further, in the case of the Damodar Valley Project, there was a protracted wrangling over the D V C's autonomy. As a reporter has put it, 'in the heat of controversy speed evaporated.' For the first 30 months the Corporation had no Chief Engineer. Again in many cases, not enough attention was paid to detailed planning. The Government machinery responsible for execution was not

properly conceived. The effect on progress of the many authorities involved in the Bhakra scheme may be cited as an example of the case in point. "There are two financial checks on every proposal—Central and State—and even when the two authorities jointly pass a proposal at meetings of the Bhakra Central Board, they must again separately agree to them. In addition, there are four executive authorities, with varying powers, whose concurrence must be received before engineers can set to work on any aspect of the project." Then, in the case of the Hirakud Dam project, a lack of faith and absence of ministerial support in respect of the project's technical feasibility and economic utility were responsible for a great deal of slackness in its execution. More than half a dozen committees were appointed on the affairs of Hirakud since 1948 and yet the position is said to be in a state of flux. In the context of such bottle-necks, it is not surprising that the pace of work on our development projects should have been so slow.

The Government Policy

The small progress made hitherto in the execution of the river projects raises certain important questions. It has been observed that the work on the projects has been held up due to certain difficulties and mistakes on the part of authorities concerned. But it may well be asked, whether these could not be avoided ? At least some of them could be. And as a matter of fact, some of the difficulties were already present before the work started. But the Government, in their extraordinary enthusiasm for planning, merely over-looked them. It required no stretch of imagination to know that, if all, or even some major projects

were to be implemented together, the capital expenditure required would be too large to be met out of the country's present resources.

Again while planning the river valley projects, the Government ought not to have forgotten that their execution would have to be under-taken simultaneously with other programmes of development in the fields of industry, agriculture and transport. And the total volume of savings in the country was not sufficiently large to make available all the requisite funds for development. In view of the limited resources of the country, an order of priorities should have been laid down and only the most important projects should have been selected for actual execution. The failure to do so has been responsible for the existing state of affairs. Work has had to be held up because the Government tried to bite more than it could chew.

Inflation is said to be another cause necessitating and justifying a reduction of Government expenditure on river projects. But it is forgotten that inflation itself is, to some extent, the direct outcome of the Government's failure to confine itself within its means. The indiscriminate expenditures on various schemes, without paying regard to their relative urgency, have been very largely responsible for the ghastly specter of inflation. It could have been avoided, had the Government been a little more realistic in planning.

The Government's planning has been defective in other ways too. For example, it did not take into account the costs of the projects. The money expenditure does not give us a correct idea of the real costs involved. These must be measured in terms of the materials and labour

necessary to complete the projects, and the advantages the country shall have to forego owing to their use for the construction of river projects, rather than for other purposes. Materials, like steel and cement of which the production in India is not very large, shall have to be diverted from other useful employments in order to be used on the river valley projects. This is bound to check the progress of development in other fields. The disadvantage from this source has got to be set against the advantage from the development of river projects. In order to maximise the gain to the country, a programme of balanced development in various directions should have been prepared and concentration on one particular aspect avoided. The development of the economy as a whole, and not merely of certain parts of it, is to be our goal. But the Government planning seems to have over-looked this necessity at least in the beginning.

Besides these defects in planning, certain other shortcomings of the Government policy have also come to light. There is, for instance, no proper co-ordination between the Central and the State Governments, and conflicts between the two are not uncommon. Sometime back a great difference arose between the Government of India and the Punjab Government over the issue of control of the Bhakra Dam Project. Differences in matters of finance are very conspicuous. The State Governments have not been happy over the cuts in grants and loans to them made by the Central Government in view of the financial stringency. The lack of co-ordination between different Governments has also resulted in a competition for securing

the services of technical experts and the allocation of necessary materials.

Yet again, the Government policy has been inconsistent. This inconsistency has been largely due to the over-looking of the many difficulties and limitations by the Government in its enthusiasm for rapid development. As a result the speed of work on the different projects has often been changed, and in some cases even suddenly. Such sudden stoppages or slowing down of work have produced very harmful effects. They have shaken the confidence of the public in the executive ability of the Government. And they have also led to a lot of waste and a great increase in costs.

Planning Commission on Policy and Administration

That the planning of river valley projects did not receive careful handling in the past is very well borne out by certain observations of the Planning Commission. "It would not be correct to say of all projects included in the Plan," the Report points out, 'that works were started after detailed technical investigation and careful assessment of the economic aspects.' Hence a note of warning is to be found in another paragraph. "It is necessary to ensure that no large project is undertaken without the State Government concerned satisfying itself that investigations on the project are sufficiently detailed, that the financial forecast is accurate and that funds are available for the execution of the project according to the most economical programme. Only in this manner can we avoid the situation that has arisen in the last few years under which a number of proiects have been simultaneously taken up in

different States without careful project reports and financial and other estimates, or an assessment of their aggregate effects on the over-all economy of the country."

On the question of priority, the Plan has laid down three broad principles, viz., (1) Projects which are expected to yield additional food grains at an early date should be given preference over others. (2) The big multi-purpose projects should be so phased with as to ensure an early completion of their irrigation aspects. (3) Power generation should be carefully regulated and taken up in stages as the demand arises. On the whole, these are quite plausible criteria in fixing priority for the execution of projects. But obviously these are not enough. Though suggestions have also been made with a view to secure public co-operation, much will necessarily depend on how details are worked out by the executive personnel both at the top and at the lower rung. Too many authorities and too much of red-tapism are long-standing charges against the Government administration in the country. Smoothness of administration, it must be remembered, holds the key to speedy, and hence economical results.

The Planning Commission has, however, done well in emphasising the need for plans for a longer period than five years so far as irrigation and power projects are concerned. Two to three years are required for investigation of the larger projects, and their execution is likely to take five to ten years. Suggestions have therefore been made with a view to evolve a fifteen year plan which will, on the one hand, utilise continuously "the technical resources, equipment and organisation built up by States" and, on the other

ensure investigation and execution to proceed on lines carefully arranged.

Major and Minor Projects

A word might be said here about the relative place to be assigned to major and minor projects in the development of country's economy. Often controversy is raised over this issue. Some lay more emphasis on major schemes, while others on minor projects. But as a matter of fact there can be no conflict between major and minor schemes. There are some places which offer scope for large projects, and there are others where only smaller projects are possible. Each area should naturally be served by the kind of schemes for which it has facilities. Major and minor schemes are, therefore, complementary and not competitive.

Very often the relative merits and demerits of major and minor schemes are not fully appreciated on account of which some confusion arises as regards their relative suitability under particular circumstances. At least four distinct advantages are easily discernable in the case of minor schemes. The initial outlay involved in them is comparatively very small. They can be quickly executed and hence can yield quick results. Again, they do not create much difficulty regarding technical personnel and equipment. Moreover local resources can be easily mobilised for their execution. As against these, the disadvantages are their high cost of maintenance, their relatively short life, and the limited benefits they are able to give.

On the other hand, the major schemes are advantageous in that they are generally multi-purpose in nature and make possible the utilisation of the surplus water of our rivers

which flows waste at the present. They also bring more permanent benefits and give better protection in years of scarcity as there are large catchment areas. But then they generally take long time for execution and involve very heavy expenditure. They also require special assistance by way of foreign personnel and equipment.

Now when we look around us, we find that there is a great shortage of funds, technical personnel, equipment and certain other essential materials. And further, situated as we are, we urgently need an increase in production of food grains and raw materials as quickly as possible. There is also the great necessity of utilising our local resources so as to increase employment in the country. Considering all these, there should remain no doubt about the relative place to be assigned to major and minor schemes. For the next few years, we will do well to lay more emphasis on short-term or minor projects. This will bring immediate returns in the shape of increased food production and thus will save valuable foreign exchange for import of capital goods not available in the country. This will also help us to solve unemployment problem to a great extent.

Suggestions

In the foregoing pages we have discussed the role of river valley projects in stepping up the national economy to a higher and balanced level. Reference has also been made to the various defects in approach, planning and execution on account of which the progress so far has been unduly slow. Now in the end, a few suggestions or lines of action might be outlined for tackling the major obstacles in the way.

In the first place, there is the need for a national policy for the development of irrigation and power formulated in the interests of the country as a whole. This is necessary, as has been emphasised in the First Five Year Plan, because of several reasons. Firstly, the facilities for irrigation and power are not equitably distributed throughout the country. As such where ever they do exist, they should be developed in the general interests of the community. Secondly, the river valleys are not confined to particular State boundaries. Naturally therefore, for achieving maximum results, there is the need to integrate the development schemes of different States. Thirdly, these schemes present difficult engineering and other technical problems which necessitate a pooling of the best knowledge and resources available in India and outside. Fourthly, large sums of money are required which in many cases are beyond the resources of the individual States. Central assistance and planning are, therefore, needed for implementation of big projects.

Another fruitful line of action would be to undertake a thorough and searching scrutiny of our existing schemes. This is necessary to eliminate all wasteful expenditure, to tone up Government machinery and thereby to inspire public confidence. At the present there is great deal of distrust of Government machinery. It is said to be inefficient and corrupt. Some time back the Economy Committee of the Parliament published very amazing and disquieting facts about rank mismanagement and irresponsibility with which some of our multi-purpose projects are associated. Certainly with all this, we cannot make any great progress. There is therefore, the need to root out corruption, to

make the machinery efficient and honest. The river valley schemes are good ; they are of very great significance. But we must ensure that they are honestly executed.

The lack of adequate finance is undoubtedly one of the major impediments to be removed. This is a difficulty that has to be faced in every sphere of our economic life. To some extent, this difficulty can be overcome through foreign loans which, besides making the funds available, help in getting the much needed technical personnel and capital requirements. And it is easier to raise loans from certain international agencies for specific and technical schemes than for general purposes. We have been able to get so far about 38 million dollars from the World Bank.

Yet we cannot depend to a large extent upon foreign capital. Besides the difficulty of availability, it will not be ultimately desirable to rely too much on foreign aid. The bulk of the required capital shall have to be found from our own resources. We must, therefore, mobilise all available internal resources. For this purpose, loans attached to specific projects may be raised. Such loans have an advantage over general loans in as much as they create enthusiasm among the local people who are to benefit from those projects. As a matter of fact, this is a most useful way of enlisting public support. In addition to such loans, a betterment levy may be imposed on the people who will receive benefits from such projects in the form of increased productivity and value of their land and other assets. Such anticipatory levies are perfectly justified, and have been levied on many occasions. Then again, some help

can be had through the levy of agricultural income tax and an upward revision of water rates.

Even then we may not be able to get the necessary finance. In view of this and other considerations, more weight needs to be given to minor projects. At the same time it will be advantageous, if we concentrate on some selected projects and try to complete them as soon as possible, instead of proceeding on a large number of them for which requisite resources are not available. And we will do well to bear in mind that resources are needed not only for the execution of the various projects, but that they will also be required for their utilisation. It has been roughly estimated that for every rupee laid out on river valley schemes, about three rupees will be required for their proper utilisation.

In order to remove the difficulties created by the shortage of technical personnel, it may be suggested that a central pool of such available persons should be founded. The engineers of the Government, Public Works Department, the Army as also those working outside the Government services should constitute the proposed pool. Systematic and centralised efforts should be made to import specialised skill from other countries on reasonable terms. Of course, if the chief emphasis is laid on minor projects, as has been suggested, this difficulty will automatically get removed to some extent.

Finally, the task that we have before us cannot be successfully completed unless the States can arouse mass enthusiasm and secure full public support. Well thought out

and directed efforts are needed to enlist public co-operation on a nation-wide scale, to make the people feel that these are their own schemes. Only then we can expect people to be willing to make special sacrifices for their completion. Let us hope that now sincere efforts will be made to expedite the execution of the various river valley projects.

CHAPTER V

MOVEMENT OF AGRICULTURAL PRICES

Price Fluctuations : Causes and Effects

In a free private economy, prices are liable to fluctuations, and agricultural prices more so because of certain inherent characteristics of agricultural production. One most potent reason for price fluctuations is, what is known as, trade cycle oscillations. During the last hundred years, the economy has been subject to a rythmic change in prices due to cyclical changes in economic activities. Such cyclical changes are characterised by two marked phases *viz.*, (1) booms and (2) depressions. During the boom period, there is an increased economic activity with all-round increase in demand and prices. But the boom does not last long. For reasons inherent in the economy, it comes to halt, and after a jerk (which is generally called crisis) booms are over-taken by depressions. During the depression period, there is a slackening of economic activities with an all-round fall in demand and prices. The depression, however, does not continue indefinitely. After the rock-bottom prices have been reached, signs of increased activities begin to re-appear (this is called revival) and booms again over-take depressions.

Such changes of prices affect all classes of people and particularly agriculturists. During the depression period, agriculturists are hit very hard. It is true that owing to fall in prices, depression brings about a general contraction in

income ; but in the agricultural sector, the contraction tends to be greater because the agricultural prices fall faster than industrial prices. During the last depression in the thirties, it was found that agricultural prices were much lower than the industrial prices and farm income had shrunk so considerably that farmers were able to save themselves by sale of what was then called 'distress gold'. Though the industrial sector suffered from fall of prices, yet the loss in that sector was considerably less as industrial prices stood at a higher level than agricultural prices.

On the other hand, during a period of rising prices, agriculturists are in a correspondingly better position as agricultural prices tend to rise faster than industrial prices. During the last few years, which have been a period of rising prices, agricultural prices have remained well above the general prices. This has brought about some prosperity in rural areas—though for the majority of farmers, such rise in prices has meant more hardship than real benefit.

This rapid fluctuation of prices, both in the upward and the downward directions, is a fundamental characteristic of prices and in agriculture the fluctuation is greater due to comparative inelasticity in the supply of agricultural products. Farmers cultivate their lands whatever be the demand for their products. Supply does not increase because there is no way of extending the area of cultivation. On the other hand, when prices fall, supply does not correspondingly decline as the farmer does not limit the area of cultivation. The result is that, with the given supply which is limited by the annual stock, agricultural prices are determined purely by the condition of demand.

When boom prevails and industrial activity increases, a strong pressure of demand is felt on agricultural products, particularly on raw-materials, and there is a sharp rise in prices. On the other hand, when industrial demand slackens, there is a glut in the market, and the agricultural prices sharply decline.

This inelasticity in the supply of agricultural products makes the position of the agriculturists highly vulnerable. It is true that during rising prices, their position is not really so bad, for their income rises and, therefore, they are correspondingly better off. But even then there is a a danger in the position. Booms are essentially short-lived, and farmers are not frugal in their habits of spending. The spell of income which farmers enjoy during this period quickly passes away, and when they relapse into the period of falling income, their hardship tends to be greater.

Apart from the cyclical change of prices, price instability is caused by floods, pests, famines and wars. Floods and famines cause rise of prices, but such rise in prices does not benefit the agriculturists. The scarcity of crops hits them hard, and as they do not have enough purchasing power, they are faced with starvation and death. The post-war rise in price has hit different sections of the cultivators differently. A vast number of workers, who do not have lands to maintain themselves, find it difficult to buy enough essential agricultural commodities at high prices, and are, therefore, faced with very great hardship. That section of the population who are just able to maintain themselves with farm income may not be worse off, but are neither better off, and have in no way benefited by the rise in prices.

Only a small section of the agriculturist population, who have surplus income from land, have benefited by the rise in prices. It is in the hands of only these people that some savings have accumulated, but the number of such persons is exceedingly small, and the amount of savings is also not considerable.

It is thus apparent that fluctuation in agricultural prices does not benefit the agriculturists; in fact, it is positively harmful. Fall in price reduces the farm income; and rise in prices benefits only a section of farmers who have surplus yields from land. In a country like India, where majority live on the margin of subsistence, rise in prices affects them adversely. Further, rise in agricultural prices leads to rise in the prices of manufactured goods. Essential commodities like cloth, oil, medicines become too costly for farmers who do not enjoy surplus income from land. In the interest of farmers, it is, therefore, essential that agricultural prices should have a certain degree of stability. This will stabilise their income. But what is more, this will also have the effect of stabilising industrial prices of essential commodities, and thus of the cost of living. But before the plans for price stabilisation are discussed, it will be useful to have a brief review of agricultural price trends during the last few decades. Experience of the past may be utilised as a guide for future policy.

Agricultural Prices—A Study in History

Agricultural prices during the last fifty years can be conveniently studied in three different periods which show distinctly separate trends. In the first period which includes up to 1913, prices had shown a slow and steady

rise. In the second period which includes the interval period of 1919—39, prices had registered a cataclysmic fall. In the third period which includes the last war and the present post-war years, prices have violently shot up and are still showing inflationary rising trends. A review of causes leading to such periodic change of prices would be useful in analysing present trends and laying down future policies.

Throughout the later part of the last century, and the beginning of the present century, agricultural prices, as has just been mentioned, had shown rising trends; not that there had been no cyclical fall in prices, in fact during the depression of 1873 prices had sharply fallen. But apart from such cyclical changes, the secular trend during the sixty years covering 1850—1913 had been one of progressive rise in prices. Various causes contributed to such rise in prices. During this period, agriculture in India lost its original character. The agricultural resources of India were not utilised simply to maintain village self-sufficiency. The British rule in India succeeded in commercialising India's agriculture and linking it to the world-market. There was increasing export of India's raw materials to the out-side world, and the opening up of railways and development of steam-ship facilitated the process. An additional stimulus to India's foreign trade was given by the opening of the Suez Canal which shortened the trade route to Europe, and thus quickened the delivery of India's export goods to European markets. Besides, the period was remarkable for comparative peace, and most countries of the world utilised the period for a rapid progress in industrialisation. This stimulated a further

demand for the export of India's raw materials and brought about a spurt in prices. Lastly, the Gold Exchange Standard, as it then operated, helped to create a circulation of additional currency which, combined with increased demand, further stimulated agricultural prices.

It should be noted that the rise in agricultural prices during this period did not react altogether unfavourably on the Indian economy. In fact, if anything, the agriculture in India benefited by the rise in prices. The rise in prices was slow and steady and did not cause any violent mal-adjustments. Increased prices in agricultural goods created increased farm income. On the other hand, owing to rapid progress in industrialisation and great technological improvements, manufactured goods were cheaper, and increased money income of the farmers created increased earnings. It is true that owing to commercialisation of agriculture, rural economy had to undergo a rapid transformation. Lands passed into the hands of money-lenders and big cultivators; a section of the population became landless, and rural indebtedness increased. But yet the over-all picture of the agricultural economy was one of increasing prosperity under the stimulus of slowly rising prices.

But the history of the inter-war period was entirely different. In the immediate years after the World War I, there was a boom followed by a short lived depression. After that, there was a revival up to 1929. During the period of revival, there was a general prosperity all over the world. But India, however, did not share this prosperity to the same extent as the rest of the world. Her currency was over valued to the extent of 12½ per cent (as 18d. ratio

meant a 12½ per cent increase over 16 d. ratio), and internal prices were, therefore, lower to the same extent. But still owing to boom conditions all over the world, there was increased demand for India's exports, and agricultural prices maintained a fairly satisfactory level.

But a turn of events came in 1931. In the September of that year, England went off the gold standard, and the other countries soon followed. There was a monetary chaos all over the world, and a depression of unprecedented magnitude set in. World production and trade rapidly dwindled, and India suffered very badly in this general economic confusion. Agricultural prices began to fall; and as has been pointed out before, owing to inelasticity of supply, agricultural prices tended to fall faster than industrial prices. In other words, loss of income, due to depression, was much greater in a country like India than in the manufacturing countries. Most countries were faced with the balance of payment difficulties; and restrictive trade practices, exchange controls and currency manipulations were freely resorted to by these countries to balance their trade position. The thirties of the last decade witnessed unfortunate experiments in currency and trade—and the results that followed were simply disastrous. Production shrank, trade dwindled and in desperate efforts to improve the economy, other countries resorted to the 'economy of restrictionism' which only aggravated the trouble that was sought to be removed.

In India, the situation was, however, a bit different. The fall of agricultural prices, apart from bringing about a fall in agricultural income, also created a balance of payment difficulty. The low value of our agricultural

product was not sufficient to pay for our imports. Further, imports tended to be stimulated because of over-valuation of the rupee, and the consequential unbalance between our exports and imports tended to be still greater. The gap was met by huge exports of gold—a phenomenon which was almost unprecedented in India's economic history. The amount of gold sold exceeded over 100 crores of rupees and most of this gold came from the hoarded stock in the rural areas. The distress of the farmers caused immense hardship, and as they tried to over-come their distress by the sale of gold, this transaction was, therefore, described as the "sale of distress gold."

But within ten years, the picture again changed, when agricultural prices began to shoot up due to abnormal conditions created by the last war. The first serious dislocation in prices took place in 1942 when the Bengal famine broke out. The abnormal height to which the food prices shot up in that year were considerably scaled down in the succeeding years; but the pre-war level of prices could not be restored. In sympathy with food prices, prices of other agricultural commodities also began to rise. In the meantime, inflationary forces were set in, and rise in agricultural prices began to take place under two sets of forces. Firstly, there was the abnormal condition created by the war which stimulated demand for food and raw materials; and secondly, there were inflationary forces which made high prices still higher. Moreover, agricultura supply, being essentially inelastic in nature, did show no sign of increased production; and as a result, limited stock with increased demand brought about very sharp rise in prices. Over and above these, hoarding and speculative

stock-piling tended to limit the supply, and agricultural prices began to record almost abnormal rise. Just as during the depression years, agricultural prices fell faster than industrial prices, so also during the period of rising prices, agricultural prices began to rise faster than industrial prices.

III

Price Stabilisation in the Context of Depression

It is apparent that throughout the course of this century agricultural prices have been subjected to great fluctuations. Such changes in prices do not benefit the farmers. They are harmful, for they affect the money income, and in all cases reduce the real income. When prices fall, agricultural prices fall faster than in other sectors of the economy, and hence the real income of farmers is reduced. When prices rise, agricultural prices, it is true, rise faster than in other sectors. But majority of cultivators, who do not have enough lands to maintain themselves and, therefore, do not enjoy surplus income from land find the cost of living greatly increased and their real income correspondingly reduced. Further, such change in prices brings disparity between industrial and agricultural sectors, and thereby adversely affects the economy as a whole. In the interests of farmers and of the economy as a whole, it is essential that agricultural prices should be fairly stabilised, and devices should be adopted to maintain a high and stable level of prices.

A review of price changes has shown that there are various causes that have contributed to price fluctuations. A condition of stability, therefore, implies that these causes should be remedied, if the given objective is to be fully

attained. It is true that each period has its own sets of causes and the remedies called for are, therefore, peculiar to its own requirements. No general policies can, therefore, be laid down. The remedies suggested are to be considered only in relation to the causes assumed.

The most important cause leading to fall in prices is the onset of depression in a cyclical phase. Obviously, elimination of trade cycles alone can prevent depression and the consequent fall in prices. It is not the object of this paper to go into the causes of trade cycles and to suggest remedies for preventing them. It can only be broadly suggested that valuable researches in the last few years have thrown much light on the nature and causes of trade cycles, and most countries are equipped with the necessary technique for fighting the onset of a possible depression. Contra-cyclical policies are handy instruments for effective actions. Under-taking suitable public works, maintaining a high rate of investments, appropriate fiscal and monetary policies can effectively prevent trade depression, and thereby prevent the fall of agricultural prices as well.

But prevention of trade depression is only a long-term policy which takes its own time for implementation. If and when, depression actually sets in, proper remedies have to be adopted to mitigate, as far as possible, its harmful effects. These are plainly short term measures, and they cease to be valid when the depression is over. During the last depression, most countries of the world adopted measures of some kind or other to mitigate the hardship of falling prices. Not all the methods gave desired results,

yet they did something to give relief to distressed farmers.

The broad policy which is pursued during depression to bolster up prices is what may be called "a policy of restrictionism." By artificially restricting cultivation and limiting output, prices are sought to be raised. "In America, the Agricultural Amendment Act (more popularly known as A.A.A.) attempted to subsidise farmers to pursuade them to restrict output. President Roosevelt gave his full support to the plan, but later on the Supreme Court declared the Act null and void. At present the American Farm Credit Corporation, with a huge capital, attempts to maintain prices by buying off surplus farm products. In Pakistan, the Jute Board attempted in 1950 to maintain jute prices through State purchases at officially fixed rates. The farmers are usually ignorant of the market forces of demand and supply, and of the mechanism of price determination ; they have no waiting power, and their eagerness to sell only depresses prices in an already depressed market. Restriction in supply combined with State support for prices is an essential part of a policy for maintaining agricultural prices during depression.

In the undivided India, in 1934, an attempt was made to maintain jute prices by restriction in cultivation. The policy succeeded though not fully, as the other measures necessary for maintaining prices, *viz.*, State purchase, or State subsidy were not implemented. Restriction in cultivation is only the beginning of a long process of State action. Owing to the eagerness of the cultivators to sell, prices tend to soon get depressed, and on such occasions, the State must come forward with the necessary financial

help. But such organisations were totally absent in our country. Closely linked with the policy of limiting output is the policy of price-fixation. Fixation of minimum prices during depression is a common practice in industries. A common price policy can be pursued only when there is a strong organisation to enforce the decision. In industries, this condition is easily fulfilled. But agriculture is highly unorganised, and the policy of a common price is difficult to pursue. But in some sectors, agriculture is fairly organised, and a common policy has been satisfactorily pursued. In Brazil, coffee plantation, and in Malaya, rubber production are fairly organised. In plantation industries, output is easily adjusted to the price, and surplus output, if any, is withheld from the market. In extreme cases, surpluses may be burnt off and destroyed. Such a policy has, however, come in for public criticism as being utterly anti-social. But during depression, agriculture shows the peculiarity of plenty in the midst of scarcity—and sheer necessity compels producers to take to such anti-social policies. In India, prices of tea and coffee have been maintained by fixation of minimum prices.

Other measures adopted to maintain prices are international barter and trade agreements. Two countries may enter into separate trade agreements to buy off each other's surplus commodities. In 1934, India entered into an agreement with Japan to take off her textiles in exchange for a fixed export of her cotton.

The Post-War Trend and the Government Policy

The rise in prices which had started with the outbreak of hostilities continued in the immediate post-war period

due largely to a similar set of causes. Inflationary conditions persisted with unabated force. Failure of crops in one or another part of the country was a sort of regular feature. Above all, while demand still moved ahead of supply, a series of events occurring at regular intervals were responsible for pushing prices to new heights. In early 1947, the Government declared a policy of general decontrol. It provided a new spurt to the price rise. To take its effect on a single group of articles, for instance cereals, the index number of prices recorded an increase of about 100 points, rising from 290·5 in January, 1947 to 381·0 in June 1948.

Then the partition of India made conditions worse confounded. India lost some of her best cultivated areas to Pakistan. Most of her jute and cotton areas were gone. With 82% of the population of undivided India, she retained only 69% of the irrigated area and 65 to 70% of the rice and wheat areas. These factors caused prices to rise still further. The cultivators, however, derived little benefit from it. As we have already pointed out, for the majority of them, who do not have enough lands to maintain themselves and, therefore, do not enjoy surplus income from land, the cost of living increased still higher and the real income was correspondingly reduced. It was for a handful of middlemen, hoarders and profiteers to gain substantially at the cost of the community. The commoner depending on fixed income suffered equally from the coutinually rising cost-of-living. Industrialists too were disgruntled with rising prices, resulting from the rise in raw material prices.

With the devaluation of the rupee in September 1949, a new cause for apprehension was generated in the minds of

the public, and it was feared that a fresh spate of inflationary forces would be let loose which will cause prices to rise to still higher levels. By and large these apprehensions did not materialise. But then a virtual stoppage of Indo-Pakistan trade, which ensued from Pakistan's decision not to devalue her currency, infused additional force, and the inflationary price-rise which was apprehended could not be avoided altogether. The conditions had not settled down fully when in June 1950, the Korean war and the U.N. intervention brought about a new set of factors under which international demand for staple commodities increased several times. Stock-piling of industrial and strategic raw materials and larger demand for cereals all over the world proved to be as unfortunate as conditions of war which the world had witnessed not long ago. Thus high prices continued to rise to still higher levels on account of new factors emerging one after another. The following tables will be useful to readers for a correct appraisal of the trend of movement in agricultural prices during this period.

Index of Wholesale Prices of Agricultural Commodities

(Base, August 1939=100)

1940—41	108·6
1941—42	124·2
1942—43	166·2
1943—44	268·7
1944—45	265·4
1945—46	272·6
1946—47	313·8
1947—48	356·9

Index Numbers of Wholesale Prices by Groups

	Food Articles	Industrial Raw materials
1948—49	382·9	444·8
1949—50	391·3	471·7
July, 1950	422·8	505·9
April, 1951	414·3	699·8
May, 1952	336·4	414·7
Nov. 1952	356·9	418·2
Dec. 1952	345·7	413·8]

The latest position would appear to be not so unsatisfactory as the above figures clearly indicate. According to Government pronouncements, two factors have contributed towards halting the price-rise in more recent times. In any case, the rise that took place during the post-Korean war boom was reversed. This price recession which started sometimes in early 1952 was something quite unexpected to many people in this country. It was perhaps of the nature of a crash in the speculative market than a prelude to depression. Nonetheless the general prices took a distinct opposite turn with that event. This was also due to the various anti-inflationary measures of the Government which proved their worth at this time.

Before we take up the latest position in this respect, it is proper that we should discuss briefly the policy that the Government have been following all this time and how it has worked in practice. In the early years of war, when agricultural and other prices first started rising, the attitude of the Government was one of 'wait and see'. Even as late as October, 1941, when the third Price Control Conference

was meeting under the Government auspices, very little concern was expressed at the increased food prices all over the country. Rather the phenomenon was hailed by many as a welcome feature considering the depressed condition of agriculture in the pre-war decade. It was only in August, 1943, when the great Bengal Famine had already caused havoc to millions, that maximum prices were fixed for staple food grains like rice and wheat. Thereafter, the technique of price control evolved gradually over the war years, and by the end of war, it covered almost all primary commodities. Statutory rationing was enforced in all industrial areas which was later on extended to large towns of some importance; and at the time of partition, it covered more than a third of India's population.

Though this assured supply of food grains to sizeable proportion of the people, it caused misery to others in various ways. Procurement by Government agencies did not always come upto expectations and ration commitments could not be fulfilled. Moreover production in some parts of the country was adversely affected by the intensive procurement drive on the part of the authorities. These resulted in widespread black-market activities, growing behind the eyes of law. Free market prices, on the other hand, swelled to inordinate proportions in non-rationed areas because of corruption, bribery and inefficiency in the rank and file of the staff. From the point of view of administration, price control measures were very largely effective in the case of a few selected commodities like sugar-cane, jute and cotton. This was on account of there being well-knit buyers' organisations. Even then,

however, the pressure from the demand side caused prices to move beyond the official ceilings.

But perhaps the greatest concern of the Government was with the food-grain prices. For a long time after the war, the policy centered round that of holding the price-line at the existing level. To think of reversing its trend was still considered to be premature. In the meantime, steps were being taken to curb inflation through monetary and fiscal measures. Incentive to production was being provided by way of minor irrigation facilities, supply of improved seeds and manures, and the like. But inspite of everything, very little was achieved in respect of high agricultural prices in general and food-prices in particular. This has been largely due to the lack of consistency in official policy. The proper machinery to make control measures effective was also not there. Above all, the fundamental defects in agriculture were not tackled.

The turn of events which has brought about a distinct improvement in the situation has already been referred to. In more recent times, the Planning Commission has expressed itself distinctly in favour of continuing controls. Still, however, all State Governments have not accepted its views. Last year the Government of Madras and a few others removed all restrictions on movement of grains inside the respective States and attempts were made to do away with statutory rationing over large areas. The effects have not been quite happy. The large development expenses under the Five Year Plan are likely to push prices up. As such it is necessary to be clear as to what is most desirable in the present state of our economy. Planning and decontrol, it must be noted, cannot go together. And yet

even with controls, there is no guarantee that prices will move within legitimate bounds. For that it will be necessary to tighten the grip of price control authorities.

The present downward trend in prices has raised the question of holding the price floors. Besides, the question is also being raised as to whether production could not increase if prices were allowed to rise. It will be agreed that there is no fixed relation between prices and production over the entire field of agriculture. It might be possible to raise production by substitution, by providing additional incentive to one single crop, but certainly that is not possible with respect to all crops. Unless, therefore, the more fundamental defects in agriculture, to which we have referred to in other chapters, are remedied, it will be idle to talk of raising production through price-incentives. At least if any lesson can be drawn from the past, it is this that output of primary products can rise over a recognisable long period only when we strive to bring about a complete reorientation in the cultivators' life. It is necessary, therefore, that the Government should stick to its declared objective of keeping the ceiling and floor prices 'as an essential plank in the policy.'

CHAPTER VI

PROBLEM OF MECHANISATION

One of the chief causes of low agricultural productivity in India lies in the use of crude, primitive and inadequate farm equipments. The implements that are used by our cultivators are, no doubt, in keeping with their standard of living, but surely they are far from the best that should be utilised for efficient and successful cultivation. They still rely, even in this machine age, on the centuries old wooden plough to turn the land, the crude sickle to harvest crops and the wind for winnowing cereals.

In contrast to this, agriculture in most of the advanced countries of the world has become thoroughly mechanised. In countries like U.S.A. and U.S.S.R., full advantage has been taken of the tremendous progress made by the science of agricultural engineering. As a result of this, agriculture in these countries has been completely revolutionised. There the cultivators now generally use the latest and the most perfect agricultural implements and machines. This modernisation of agriculture, through the process of mechanisation, has played a very significant part in bringing prosperity to cultivators by ensuring them better crops at reduced costs. Its part has been equally great in the reclamation of new land, converting wastes and barren lands into flourishing agricultural colonies. So has been its role in elevating rural life to a new and higher plane.

I

This brings before us a very vital question : that relates to the role of mechanisation in our fight against agricultural inefficiency and poverty. Unfortunately, on this important issue one is likely to find a good deal of confused thinking, loose and even some sentimental talk. There are some who regard mechanisation of Indian agriculture as highly necessary and desirable. They consider it a sheer waste of the country's limited resources to continue the use of outmoded instruments and primitive technique, when science has placed at our disposal new and highly efficient means. They, therefore, want the farmers of India to try the "modern way" in agriculture which will mean more and better production, and consequently a higher standard of living for them. Many of our problems will thus be solved.

But on the other hand, there are the pillars of orthodoxy, for whom the plough and the bullock are the very symbols of our ancient civilisation, who dread mechanisation as an unmixed evil. According to them, mechanisation is totally unsuitable for the country ; it is neither necessary nor desirable. They advise us to take special note of our peculiar economic and social conditions, instead of trying to imitate what is being done in some foreign countries where the conditions are widely different. Economic and social progress, they remind us, is at every step guided and determined by the existing conditions. Any attempt to ignore them will simply mean inviting disaster.

Such conflicting view-points are obviously a very great hindrance in the way of clear thinking and in arriving at any definite decision on the issue. But in view of the great

urgency for re-organising our agriculture to fight against the poverty of soil and poverty of cultivator, we must make up our mind, define our policy and attitude with regard to the place that mechanisation should be given in the future agricultural economy of the country. Here in this article, an attempt has been made to analyse this intensely vital problem of mechanisation as an aid to clear thinking.

It will be helpful and convenient as well, if we begin by carefully examining the various arguments that are generally put forward to show that there is no scope for mechanisation of agriculture in India, and that it is neither feasible, nor desirable. In main, the case against the mechanisation of our agriculture is built on the following grounds :

1. That the holdings in India are too small and scattered to permit mechanisation of agriculture.

2. That mechanised agriculture would lead to the displacement of a large proportion of the rural population dependent upon land, and thus it would aggravate rather than solve our difficulties. So long, therefore, as agricultural labour is cheap and there are too many people on land, the use of labour-saving devices will neither be feasible, nor desirable.

3. That mechanisation of agriculture does not lead to the maximum use of land.

4. That the capital resources necessary for mechanisation of agriculture are not available in the country. Compulsory savings will cause extreme privation and suffering to the people, while recourse to foreign capital will be very dangerous.

5. That there is the absence of local fuel supply. If

agriculture is mechanised, we will have to depend upon foreign countries for the supply of oil and petrol. This has its own dangers.

6. That there is a great lack of technical personnel in the country.

Let us examine these objections and difficulties to enable us to reach some definite conclusion on the issue of mechanisation of our agriculture.

II

Uneconomic Holdings

First in the list is the argument relating to the existence of extremely small and scattered holdings in the country. Mechanisation obviously goes hand in hand with large scale farming. It, therefore, requires a large farm as a pre-requisite for its application. In U.S.S.R. where mechanisation has made remarkable progress, the average size of holding is 1600 acres. In Canada the average holding is 234 acres, and in U. S. A. it comes to near about 145 acres.

This pre-requisite for mechanisation is clearly lacking in our country. Our agricultural holdings are notoriously too small and widely scattered. The average size varies from about 3 acres in Bengal, Bihar and Orissa to about 12 acres in Bombay. Obviously on such toy-sized holdings, mechanisation is simply out of question. They are uneconomic even for our wooden plough and a pair of bullocks. Hence it is concluded that mechanisation has no scope in the country.

It is, no doubt, true that on such small farms, mechanisation has no place. But before we rule it out, let us examine this question a little more closely. To begin

with, we will have to accept that whether we think of mechanisation or not, we must remedy this most fundamental defect of our agricultural system. Agriculture on very small and scattered farms like ours is simply uneconomic. It unduly raises the cost of cultivation and considerably reduces the output of crops. The adoption of improved methods of farming on tiny plots becomes simply impossible. Steps will have, therefore, to be taken to enlarge the size of our agricultural holdings, if farming is to be improved in the country.

What is then the remedy for it ? It has been shown in Chapter II of the book that on an individualistic basis, there is no practical method of increasing the size of holdings. Consolidation of holdings is, no doubt, a step in the right direction, but it will be accepted that it is at best a partial remedy and that also a temporary one, unless it is accompanied by a radical change in the existing law of inheritance which, however, does not seem feasible at the present. The only feasible and effective alternative is, therefore, to try joint farming on co-operative basis. The urgency and the scope for re-organising agriculture on the basis of joint-farming has been indicated earlier. Here it will suffice to say that organisation of joint-farming is indispensable for us. In this we will find a solution for over-coming the evil effects of small and scattered holdings and for enabling the small farmers to obtain the benefits of large scale farming. By doing so, the unit of cultivation will increase in which case mechanisation will become easily possible, perhaps even necessary.

Of course, it will take some time to re-organise our agriculture in this manner. But here we are mainly con-

cerned with the laying down of the future policy. If it is found that mechanisation will be helpful in raising the standard of living of the people, efforts can be directed from now onward towards the successful organisation of joint farming. Surely the question of mechanisation is not to be looked at from the view-point of its immediate applicability. It is a question that relates to our future policy. Hence mechanisation is not to be ruled out on the ground that agricultural holdings in the country, as they are found today, are too small for mechanisation.

Yet even from the narrow view-point of its immediate applicability, the scope for mechanisation in the country is not inconsiderable. We know that the Indian Union has about 87 million acres of cultivable waste land which is not being put to any use. It is exceedingly necessary on our part to reclaim as much of this area as is possible. This task of reclamation has assumed very great significance because of the rapidly growing population and the increasing shortage of foodgrains and raw materials in the country. The need to rehabilitate refugees, rendered homeless by partition, has made the task still more urgent. Obviously, this work cannot be done without the help of powerful tractors and other heavy machines. Their use is indispensable for breaking new land, clearing land under jungle, eradication of deep-rooted weeds, and anti-erosion works.. A beginning has already been made in this direction. Fleets of tractors operated by Central and State Governments are doing reclamation work, and many thousands of acres of land, that have been hitherto unproductive, are going back into production.

Further, when we say that holdings in India are small, it

does not mean that there are no large holdings. Some of our holdings are big enough to be mechanised, and in fact, on quite many of them modern machines are being used with advantage. Tractors are definitely an economic proposition for all the farmers who have enough work for six or more pairs of bullocks. "This makes it possible for a farmer to do his field and farm-yard operations with the tractor, and still to keep an equal number of cattle, but instead of draft animals, milking cows can be kept which bring in a steady cash return."

Finally, while discussing the question of the size of holdings *vis-a-vis* mechanisation, one should not think that holdings must necessarily be very large, running into hundreds of acres. In the beginning, of course, tractors were essentially built for very large holdings. But now the position has considerably changed. The manufacturers of agricultural machinery have persistently, and with success, explored the possibility of making small tractors and other machines suitable for work on small holdings of 20 to 50 acres. Now small all-purpose tractors of very low horse-power are available. They have been specially designed to meet the economic and technical needs of lower acreages. As such it is now possible to mechanise even comparatively small farms.

III

Question of Unemployment

Mechanisation of agriculture in India is regarded as highly undesirable on the ground that it will result in tremendous displacement of labour. Assuming that one worker will be required instead of four with mechanised farming, it is estimated that about 77·5% of the total workers, or

nearly 67 million workers in the country will be thrown out of employment. It is also felt that to find alternative jobs for the displaced persons on such a large scale will be too difficult. In support of this view-point, our attention is drawn to the meagre amount of employment provided by the development of large-scale industries in the country. Though the development of large scale industries has been rapid, particulary during the last twenty years, the number employed in them is hardly 3·5 millions. Even if this present number is doubled, through expansion in industries which will take years, only a small fraction of the total number of displaced persons will be able to get employment. The rest will remain without jobs. So we are asked to imagine the extent of hardship and suffering that will be caused to the people in the event of mechanisation of agriculture.

Again, we are also reminded that mechanisation became necessary in countries like U.S.A. because of acute shortage of labour and vast resources for extension of cultivation. But in our country the conditions, in these respects, are widely different. On the one hand, there is abundance of cheap labour and on the other, the scope for extensive cultivation is extremely limited. Thus mechanisation is unnecessary for us. It is said that so long as there is abundance of labour, the use of labour saving devices will be neither feasible nor desirable.

From the above, it appears that the case against mechanisation of agriculture in the country is very strong. But a close examination of this objection and other allied matter will show that, in reality, it is not so.

In the first place, the fear of unemployment is often exaggerated. That there may be some amount of unemployment, consequent upon mechanisation, necessitating a difficult process of shift and adjustment, is not denied, but that it will displace about half of the total population of the country is surely open to question. Again, while the magnitude of unemployment that will be caused by mechanisation is unduly exaggerated, the capacity of the economic system to absorb the displaced persons is greatly under-estimated. This is highly unjust. Mechanisation of agriculture will help in stepping up the economy of the country to a higher level. As a consequence, secondary and tertiary occupations will multiply at an increasing rate, offering adequate employments to the surplus workers. To cite, in this context, the meagre employment that the large-scale industries of the country offer to-day is not at all valid. Instead, we should consider the aggregate employment that the different sectors of the developed economy will offer to the people. In its present state of lop-sidedness and under-development, the economy of the country is simply unable to offer adequate employment even to the existing number of workers.

Then there are a few other significant things which need our consideration in this context. First of all, we should not lose sight of the fact that at present there is an excessive pressure of population on land,—a burden that is far beyond the capacity of land to bear. Quite a large number of people are engaged in work on overcrowded holdings where their productivity is nil or almost nil, suffering, therefore, from what is technically called as disguised unemployment. They are, no doubt, engaged in

some kind of work. But that is no consolation, for we all know that it is not work that matters so much as the nature of work. As has been put by William H. Beveridge "Employment is not wanted for the sake of employment ; it is wanted as a means to more consumption or more leisure, as a means to a higher standard of living." Employment which is time-wasting and unproductive, amounting to digging holes and filling them again, is of no importance under normal circumstances. So there is already the need to withdraw the surplus number of people from agriculture. That will not only give them the chance to render useful service, but will also raise the farm output.

Besides this, we should also remember that many farming operations are very irksome and cause great physical strain. The farmers in certain seasons have to work very hard for hours together which terribly wears them out. This strain can be successfully avoided by mechanisation of agriculture. This will provide, besides reducing the strain and raising the dignity of agricultural work, more liesure for recreation and other healthy activities.

Again, a large number of women are also included among the workers. It is highly necessary that they should be spared from this work so that they may be able to attend to more urgent things which they alone can do. Further, many children are also driven to farm work at an early age and consequently their education, which is so essential to make them good and useful citizens of the country, is sadly cut short. In view of all this, the fear of displacement of labour should not over awe us to any undue extent.

Yet again, we must remember that one of the urgent

needs of the country is to reduce the heavy burden of our vast cattle population which is, indeed, a great drain on our limited land resources. In India, the draught animal is the bullock. Bullocks are employed not only for agricultural operations in the field, but also for lifting water from wells, grinding corn and crushing oil seeds and sugarcane. Obviously, therefore, an enormous number of bullocks are maintained in the country. But on account of the fact that both men and cattle derive their sustenance from the soil and there is already excessive pressure of population on land, the amount of fodder available for cattle is shockingly inadequate. Moreover, as the bullock is essential for cultivation, it gets preference over the cow. The latter gets whatever is left after feeding the draught cattle. Generally, she is left to find food where she can. Naturally, the poor diet of the cow is bound to re-act unfavourably on her milk yield and her progeny. The former goes to reduce the supply of a valuable protective food for human beings, while the latter means inefficient cultivation. The deterioration in the quality of the bullock is sought to be made up quantitatively. The number of bullocks, therefore, further increases. This in turn, aggravates the fodder situation still further, and in this way the vicious circle keeps on feeding itself.

Thus there is the great need for a reduction in the number of bullocks. For this, mechanisation is essential. A tractor, unlike a bullock, does not derive its motive power from the produce of the soil. As such its use will lighten the burden on land and release a certain area for the growing of food crops. At the same time cows will also be better fed which will mean more milk and milk

products for man. It is estimated that in U. S. A. over 12 million draught horses and mules have been replaced by tractors which, in turn, have made available about 33 million acres for the production of the food crops. Indeed, this is a very important aspect for India.

IV

Influence on Productivity

There are quite many people who are of the view that mechanisation does not lead to greater productivity. They point out that except for the first time, crop yields are not sensitive to annual deep ploughing. Therefore, ordinary tractor-ploughing is not followed by an increase in yield per acre. But this is precisely what we need most. Greater and still greater agricultural production is our objective. We must, therefore, see whether mechanisation makes for greater production or not. Our choice shall mainly depend upon it.

A simple method of testing the productivity of mechanised farm as against non-mechanised farm would be to compare the agricultural output of various countries. But though easy it is, it will be unjustified to jump to any definite conclusion on that basis. For we are told, and rightly too, that agricultural technique is only one among a host of factors that go to determine agricultural productivity. The nature of soil, climate, irrigation, seeds, manure, unit of cultivation, character and habits of the cultivators, system of land taxation, extent of planning and state aid are all directly connected with agricultural productivity. They act and re-act on one another and jointly determine productivity. It is not possible to isolate the influence of one and estimate its contribution. As such,

if in a country, where agriculture is mechanised, it is found that yield is greater than that of another country where farming is non-mechanised, the extra yield cannot be attributed to the technique of cultivation alone. As a matter of fact great disparity in productivity is to be found even between countries using the same technique because of wide differences in other factors.

Perhaps a more reliable method would be to compare agricultural productivity in one country before and after the introduction of mechanical farming. Taking the case of U. S. S. R., we find a great increase in agricultural productivity after the introduction of mechanisation. The table below will serve to illustrate this point.

Yield per Acre

	1913	*1937*
Gram	6·8 cwt.	7·4 cwt.
Cotton	8·6 „	9·8 „
Sugar beet	6·7 „	7·3 „
Oats	23·2 bushels	35·2 bushels
Barley	17·8 „	21·2 „

In the above table, the year 1913 is taken to represent pre-mechanisation period, while 1937 stands for mechanisation period. From the table, it follows that mechanisation leads to greater productivity. But here again we are asked not to draw any definite conclusion regarding the productive capacity of mechanised farming. The reason that is advanced is that such comparisons relate only to a few crops and to some individual year. And it is well known that agricultural production records great variations from year to year on account of changes in weather and other factors.

Thus it becomes difficult to prove conclusively that mechanised farming leads to increased agricultural production. But after a consideration of all the economic conditions, it can be safely said that large-scale farming is distinctly superior to small farming. And we know that mechanisation goes hand in hand with large-scale farming. On large holdings, the cost of cultivation is low and the net produce per acre is usually higher. It is this fact which explains the rapid progress that mechanisation is making day by day in different countries of the world. Even in our country many big landlords are taking to mechanised farming, despite the fact that labour is regarded as very cheap in the country. Certainly in this age of commercial farming, lower cost of production is of the utmost significance.

Besides the advantage of lower costs, we should also bear in mind that agricultural operations can be performed much more quickly by the use of machinery than by human or animal labour. The importance of speed as a factor in agricultural efficiency is not to be minimised. "Where, for instance, an unfavourable change in the weather frequently follows harvesting time, speedy harvesting, thrashing and storing of the crop may save it from much damage. The margin of time during which the various operations for the preparation of the soil and for sowing must be performed may also in some cases be narrow, for each agricultural operation must be adjusted to changing weather and moisture in the soil, and delay may spoil the growth of crops." For India, where weather conditions are so uncertain, this has a special significance.

V

Scarcity of Capital Resources

Next, our attention is drawn to the fact that mechanisation of agriculture will require huge capital resources which are not available in the country. Our peasants are well-known for their appalling poverty. Many of them are under a heavy burden of debt. Therefore we cannot expect them to find the requisite capital resources for mechanisation of agriculture. But this difficulty of finance is confined not only to this sector of the economy. It is a general difficulty, perhaps the greatest that the economy of the country is experiencing at the present moment. That means help cannot be forthcoming from any other sector, including even the Government. The hands of Government are said to be already full, even more than full, with the various developmental and other schemes. In fact many of the urgent schemes have been held up because of paucity of funds. In view of this, it is said that if an attempt is made to mechanise agriculture, it will increase the shortage still further, creating thereby many more complications. Tractors, harvesters, etc. will then compete with other essential capital goods required elsewhere for the limited resources available in the country. As a result, progress in either direction will be arrested.

Surely, this difficulty of capital is very great indeed. But there is nothing to wonder at. It is a normal feature of a backward economy. In fact today we find ourselves in a vicious circle. As our economy is backward, savings are small ; and since savings are small, economy is underdeveloped. We must break this vicious circle. One way to do this is to greatly restrict the production of

consumers' goods and divert resources to the production of capital goods. U.S.S.R. and Japan overcame this difficulty in this manner. They made savings compulsory and used most of the national income for producing capital equipment. But it is generally pointed out that this course of action is not suitable. It causes extreme privation and suffering to the people. And it is also said that "In a democratic country, efforts to cut consumption, or to keep it low in favour of investment are sure to be resisted."

The other alternative is to borrow foreign capital which, again, is regarded as dangerous by many. But then it is not possible to have the cake and eat it too. If we are neither prepared to undergo the sacrifice involved in increasing internal savings, nor are we willing to take the risk of using foreign capital, then there remains the only alternative of postponing all developments.

But we need not pursue this point here any further, for that will virtually amount to a digression. What should be emphasised here is that there is the great need for the proper allocation of our scarce capital resources to the different sectors of the country's economy. A list of priority should be prepared, and we are sure that in that list the place of agriculture will be very high.

VI

Lack of Local Fuel Supply

Another argument that is put forward to suggest that mechanisation of our agriculture is not possible is the lack of adequate fuel supply in the country. It is said that there is already an acute shortage of petrol and oil in the country. As such, if agriculture is mechanised, the shortage will become all the more acute, and our dependence on

foreign countries for the supply of oil and petrol will considerably increase. This will make our position very precarious. In case foreign supply, on account of any reason, is cut off, the whole economic life of the country will be simply paralysed.

Though it is true that our resources in oil and petrol are very poor and there is the urgent need to economise in their use so as to reduce our dependence on foreign countries, yet it must not lead us to the conclusion that in view of this, mechanisation of our agriculture is not feasible. For there are alternative fuels on which tractors can be run. It is possible, for example, to operate tractors on diesel oil. Besides this, there is a vast scope for manufacturing power alcohol from molasses which is a by-product of our sugar industry. Tractors, etc. can be easily adapted to the use of power alcohol at the best efficiency. Some sugar factories in the country have been using power alcohol as tractor fuel for years. As such the possibility of operating agricultural tractors on straight power alcohol appears to offer very great scope.

VII

Problem of Skilled Tractor Operators

Similarly, it is also pointed out that we do not have enough technicians and skilled tractor operators in the country. Our farmers are too illiterate to be able to understand and handle the complicated modern farm machines. As things exist to day, this is very true. But this difficulty can be successfully eliminated, if there is a suitable plan and determination to execute it. For no one can say that our cultivators are inherently incapable of making improvements. If so far our cultivator has not been able to

apply to agriculture the knowledge and appliances which science has made available to him, this is not because he is inherently incapable, or that he does not fully understand his business, but because he lacks resources, organisation and even the necessary incentive to do so. In empirical knowledge, intelligence and industry, he compares favourably with the outside peasant. As such with proper facilities for imparting instructions in the handling and maintenance of tractors and agricultural machinery, he will show very good results.

In the beginning special efforts will have to be made by the Central and State Governments. They should, in co-operation with the manufacturers and importers of agricultural machinery, establish training centres at suitable places. In course of time this difficulty will not be felt. In this age of automatic machinery, the problem of technical know-how is only a matter of time.

VIII

Conclusion

Let us now sum up the results of our discussion so far. The analysis of the various objections shows that, in reality, they are not so strong and serious as to rule out the mechanisation of our agriculture. There are, no doubt, a number of difficulties in the way of mechanisation. Small unit of cultivation, for example, is a very great handicap. Difficulties will also be experienced in finding suitable jobs for the persons displaced, and in obtaining the necessary amount of capital, technical skill, even foreign exchange needed for the import of requisite machinery. Under the stress of these and other difficulties, the progress of mechanised farming in India is bound to be slow, perhaps very

slow in the short period. May be that for some time to come, we have to remain contented with the use of improved indigenous implements. But all these diverse difficulties can be, given a proper plan and machinery to execute it, successfully eliminated within a reasonable period of time.

Ultimately, however, mechanisation of our agriculture will not only become feasible, but will be necessary and inevitable. With primitive farm equipment and methods of cultivation, it will be difficult, nay even impossible, to meet the needs of rapidly growing population and fast developing industries. Even to-day, the country is confronted with a great shortage in foodgrains and raw-materials. Mechanisation of agriculture will considerably help us in raising production and the income of the farmers. That mechanisation is capable of it, has been amply demonstrated by the history of agricultural development of several advanced countries of the world, notable among them being U. S. S. R., U. S. A., Canada and Australia.

Some of those who doubt the productive efficiency of mechanised agriculture seem to look at the problem from a narrow view-point, and that causes a good deal of confusion. Mechanised agriculture should not be taken to mean literally tractor-farming only, though it is an important part of it. It includes within its scope the application of mechanical power to irrigation, transport and other allied spheres. The importance of mechanical irrigation and mechanised transport in the determination of agricultural efficiency and prosperity cannot be over emphasised. What tremendous improvement will be brought about in the agricultural economy of the country by the process of

mechanical irrigation has already been emphasised. It will not only provide adequate water to our fields at the proper time, but will also help, besides generating power, in the solution of difficult problems connected with control of flood water, soil erosion, afforestation, etc. Similarly, development of mechanised transport in the country is highly essential, if we are to have mixed-farming, vegetable and fruit-gardening with their perishable commodities.

Viewed in this way, mechanisation of agriculture in India is both necessary and desirable, though at the present the possibility of progress in this direction is, indeed, very limited. But before machines can play an important role in our economy, we will have to do certain things. In the first place, we have to create facilities for imparting instructions in the handling and maintenance of tractors and other agricultural machinery. Secondly, there is the need to have sound knowledge of the type of equipments needed. Experiments should be made to evolve designs suitable to Indian conditions. Finally, we must make suitable changes in our agronomic practices to adapt them to mechanised farming. "Modern agricultural machines are very powerful tools which can either bring great benefit by appropriate and timely use, or if applied improperly and untimely, may cause irreparable damage to the soil."

———

CHAPTER VII
COMMUNITY DEVELOPMENT PROJECTS

October 2, 1952 marks an important landmark in India's socio-economic development because it was on this day that the community development programme was inaugurated on a nation-wide scale. The programme is based on an integrated approach to the problem of rural uplift, and in the words of our Prime Minister it is expected that it "would usher in a revolution in the country. It would be a peaceful revolution, a revolution that would not see any upheaval, any bloodshed or chaos. It would be a revolution through cooperation."

However, it should be noted that although the term 'Community Project' is new and has an exotic flavour, the concept is a very old one ; it has a record of history in this country. The need for rural development and regeneration has been felt in the country for a pretty long time. This is because India is mainly a land of villages. More than 80 per cent of the people live in the rural areas and it is there that the country's most important industry, *viz.* agriculture is carried on. The country-side has, therefore, a tremendous importance in India's national economy. It is this fact which made rural uplift the principal item in Gandhiji's programme for India's renaissance. But during the days of foreign rule little could be done in this direction. While voluntry efforts lacked material resources, the approach of the Government was highly narrow and technical. The Government never took into account all

aspects of rural life, and also there was no proper coordination in its activities.

The community projects have been designed to rectify these defects. But will they result in galvanising India's country-side ? Will the dream be fulfilled ? Before we take up this question, let us know the programme.

The Community Development Programme

According to the Five Year Plan "Community Development is the method and Rural Extension the agency through which the five year plan seeks to initiate a process of transformation of the social and economic life of the villages." For that purpose the Government have made a plan to start 55 community development projects all over India. Each community project would cost a total expenditure of Rs. 65 lakhs, out of which Rs. 32 lakhs would be spent immediately, Rs. 26 lakhs in the second year and the remaining amount in the third year. The expenditure will be both in rupees as well as in dollars—58·5 lakhs of rupee expenditure and Rs. 6·5 lakhs of dollar expenditure. The recurring expenditure will amount to Rs. 12·99 lakhs, and non-recurring expenditure to Rs. 52·01 lakhs. That means on a basic type of rural community project without the provision for an urban unit, the estimated expenditure for three years (the time necessary to complete a project) comes to Rs. 65 lakhs only. The estimated cost of a composite type of project *i.e.*, a project with an urban unit, is Rs. 111 lakhs. The 55 community projects are estimated to cost Rs. 38·38 crores, of which the U.S.A. contribution will be only Rs. 4 crores. These projects cover an area of 26,950 sq. miles in 18464 villages with a population of 15·19 mill-

ions. In each project there will be approximately 300 villages with a total area of about 1,50,000 acres and a population of about 200,000. The project area is divided into 3 development blocks, each consisting of about 100 villages and a population of about 60,000 to 70,000. The development block is, in turn, divided into groups of 5 villages each, each group being the field of operation for a village level worker.

According to the final estimates of the first Five Year Plan, 75 per cent of the non-recurring expenses are to be borne by the Centre and 25 per cent by the State Governments. In respect of recurring expenditure, 50 per cent is to be met by the Centre and 50 per cent by the States. Loans for self-financing schemes will be given by the Central Government. It is also expected that after three years, the entire expenditure will be met by the State Governments.

Administration

Regarding the administration of these projects, there will be a Project Advisory Committee representative of all the non-official elements within the project area, which will assist the Project Executive Officer in the planning and execution of the programme. Since the participation of the people is of the very essence of the programme, Bharat Sevak Samaj is likely to be set up in project areas to secure the participation of the villages in the execution of the programme. A special organisation has been set up at the Centre known as the Community Projects Administration which functions under the guidance and supervision of the Central Committee appointed under the Indo—U. S. Technical Co-operation Agreement.

The Various Aspects

The main lines of activity which will be undertaken in a Community Project are as follows : agriculture and related matters, communications, education, health, supplementary employment, housing, training and social welfare. Agriculture has been given top priority with a view to augment food production. Nearly one third of the expenditure will be incurred on small irrigation schemes. The provision for assistance from the U. S. Government in manures and fertilisers is included in the Indo-U. S. Technical Co-operation Agreement. India will be receiving 108,000 tons of fertiliser from U. S. A., which will be supplemented by supplies from the Sindri factory. The T. C. A. provides for the opening of 25 Village Worker's Training Centres, besides the centres opened by the Ford Foundation.

The Community Development Scheme has not neglected health and education too. The health organization of the project area will consist of primary health units and a secondary health unit equipped with a hospital and a mobile dispensary at the headquarters of the project area and serving the area as a whole. It is hoped that at least primary education will make a considerable headway in such areas. Further, improved agriculture and increased production would pave the way for a better economic status and higher level of education.

Their Inauguration

These community projects were started on October 2, 1952 with a broad cast from the President of India, Dr. Rajendra Prashad. He made an appeal to develop a spirit of "Yajna" so that the work that has been undertaken may

be successfully completed. Spirited appeals for public cooperation and voluntary labour were also made by a number of public leaders. Initially the work was started in 75 development areas of the 55 community projects.

The latest reports indicate that the work has started in full swing and initial success has been obtained. The Government has launched an intensive propaganda drive to obtain still greater success in this direction. According to one press report, the success obtained is encouraging enough, though the tempo of progress has not been the same every where.

During the first few months, scores of miles of village roads were constructed, dozens of cooperative societies and Panchayats were formed, and agricultural extension service had taken root in the project areas. In addition to these, a number of schools and health centres were opened, extensive veterinary services, concentrating mainly on the protection of cattle against diseases, were undertaken, thousands of compost pits were dug and a number of agricultural demonstration centres were started.

Further 23 centres of village level workers were also started and 62 persons had been trained and posted at different project areas. An additional batch of 1196 persons is also now undergoing training. The press reports indicate that considerable popular co-operation has been achieved.

Varied Attacks

Inspite of the above mentioned achievements and a thoroughness with which schemes were drafted and launch-

ed, critics both from the left and the right have not spared the Government. To some extent it is quite natural since it is the first large scale experiment undertaken by the present Government. The amount of money that is going to be spent is also not small. The First Five Year Plan has made a total provision of Rs. 90 crores under this head. According to present calculation a total amount of Rs. 1000 crores would be necessary, if the whole country is to be covered by such projects. An equal amount will have to be devoted in cash or kind or in the form of manual labour by the people. Naturally the people concerned are fearful of the financial aspects of community project schemes. And it actually seems to any observer that such an amount is excessive taking into account the poverty of the people. Perhaps some such fear led an eminent Gandhite, E. W. Aryanayakam to say : "The fear is that these Community Projects, if worked out according to the Draft Plan will impoverish the villages and seriously undermine the morale of the villagers."

Fears are also entertained over the issue of foreign aid. It is felt by some people, known for their honesty and integrity, that for too little an amount, the Government of India have promised too much to the U. S. Government in the T. C. A. part. Dr. J. C. Kumarappa, the well known Gandhian thinker and economist writes: "While the U.S.A. contributes only about two annas in the rupee, it is given a controlling voice in the affairs of the community projects. Why should we receive this two annas on bended knees ? If we have no funds to cover 55 projects, why not cut down

the scheme by one-eighth, make it 48 projects only and maintain our self respect? It will hardly make any difference, while it will add to our self-help and experience." This criticism which has been voiced from many quarters has a good deal of weight in it. Apart from losing one's respect and granting diplomatic immunity to the foreigners who will come to India to assist in the execution of community projects, certain economists and political thinkers doubt even the bonafide of American aid. For example, Shri Suresh Ramabhai, an old Gandhite says, "The U. S. Government hereafter acquires the undisputed right to start and develop such enterprises or concerns in India as may help it to secure for itself a permanent market for its finished goods or build up a *pucca* ban-do-bast(a sold base) to obtain the requisite raw materials for home consumption. It thus obtains a free hand to build the American economy on firm foundation and for all time. In other words, under the agreement the agriclture of India, our handicrafts and industries, our trade and commerce, our workers and houses may be recklessly thrown at the mercy of the U. S. Government and capitalists."

Though these criticisms may be over-worded, the fear behind U. S. money is clearly underlined. It is quite natural for a country which has only recently emerged from slavery, and for people who intend to keep their country aloof from the nerve racking cold war that is going on between the two titans in the U. N. O. and outside.

The so-called Experts

A more vigorous criticism is levelled against the so-called experts imported from outside. They, in many

cases, do not know our people, our soil and our heritage. Traditions in India are different from the West. The Indian ryot is poor and illiterate. To teach him is to first live like him, to know his conditions, his complexes, his distrusts and conservatism. Any one who goes to the village with an air of superiority is bound to fail in his attempt. Moreover, it is doubtful if India is really so poor in men that for teaching ordinary agricultural processes foreign 'know-how' is needed.

The Etawah Project

In this connection generally the Etawah pilot project is quoted as an example. There are people who extol it to the sky as a unique experiment, while others run it down as a big hoax. But if a fair view of Etawah experiment is taken, it will reveal substantial achievements together with certain glaring defects. For example, the yield has improved from 20 to 25 per cent. There has been some improvement in the irrigational facilities also. Cerain useful cultural activities are also being carried on with a view to educate the villagers About the drawbacks, the general complaint is that the seheme is very expensive. No less than 125 persons from the District Planning Officer down to the Gram Sewaks are employed exclusively in the Project. A huge sum is being spent on them and that is to go on 'for ever and ever.' Secondly, Etawah project does not attach adequate importance to the basic problem of providing full employment through the development of cottage industries. The unemployment problem stares the Government in every area, and unless adequate provision is made for the development of cottage industries

as subsidiary and supplementary occupations for the people, not much can be expected in this regard. Another criticism which is true of all the projects is the system of education adopted for these areas. All the elementary schools are being run on the old lines of academic and literary education. It is no use educating the adults in rural reconstruction work, when their children are being trained for 'Babuship' in the cities. A system of basic education laying more emphasis on vocational and manual training would have been better.

Land Reforms Left Out

Again, the whole scheme of development projects completely by passes the question of land reforms. Acharya Vinoba Bhave has criticised this aspect of Community Projects very severely. There is poignant land hunger in our country today, and it has to be satisfied at the earliest opportunity. Acharya Vinoba Bhave is showing one way; China has shown the other. Whatever we choose, the result must lead to the distribution of land among the peasants. Without that basis the whole scheme will be like a house of cards which will collapse as soon as the financial help from Government is withdrawn.

Public Cooperation

The community development project schemes have made a provision for public cooperation. But this cooperation is being sought only in the advisory capacity. Moreover, even though lip service is paid to self-help and effort from the bottom, the whole scheme is going to be run by the officers trained at such places as Nilokheri. That means an addition to the already top heavy bureaucratic

administration in our country. The whole scheme, one fears, is being imposed on the villagers. Undoubtedly the villagers are poor, but if their active assistance is sought in day to day execution of work, it will prove helpful both in their education as well as in the creation of proper psychological atmosphere. In this way the wide gulf between the 'common man' and the officers will be bridged. The lack of confidence of the villagers both in official schemes as well as in the officers who come to execute those schemes is well known. That is a great psychological obstacle which can be overcome only when social reforms are initiated with peasants' direct assistance and help. Unfortunately our officers remain as ignorant as ever, even after the training. This is what the Statesman's special representative after a visit to the camp says,"A great deal of unlearning appears necessary before the right type of project officer emerges from Nilokheri. It seems doubtful too, whether a month's training will suffice. Not many officers can yet distinguish between a rice and a jawar field. The trainers also need to learn the difference between dressing for office and dressing for village work."

Sarvodaya—A Comparison

Here it will not be out of place to make a comparison between the scheme of community development projects launched by the Government of India and the ideas of Sarvodaya as propounded by Gandhiji. Prof. S. N. Agarwal, a well-known Gandhian economist, says, "The objective of the community projects in the draft outline is stated as 'the greatest good of the greatest number.' This is the old ninteenth century ideal of Bentham and John Stuart mill. Mahatma Gandhi, on

the contrary, upheld the ideal of Sarvodaya, or the well-being of all in all phases of life. The philosophy of Sarvodaya, in terms of Ruskin by whom Gandhiji was much influenced, is the ideology of unto this last, or the paying of special attention to the welfare of the lowliest and the humblest, or the 'dregs' of our society. The Gandhian constructive programme not only emphasised the well-being of all but also touched all spheres of individual, social and national life."

In the community projects, such Gandhian programmes as the social uplift of women,the so-called untouchables and the tribal people, find no place. Without tackling the social problems of the community, it will be impossible to build on sound foundations. The process of social transfermation must start. Some will like it to be rapid, while others will prefer a slow and steady progress. But unfortunately except granting juridical and legal equality, the present Government have not been able to do anything else. To plan the Indian rural society on the lines of the American community projects will bring no good. After all the problems in India are not merely economic; they are social, institutional, political, cultural and economic, all mixed together. A plan for the development of community should have been a bold and integrated plan for complete social rejuvenation and change. Dynamism in social life is needed so that all those antequated customs and beliefs, the superstition and illiteracy, the irrational mode of our lives and the atmosphere of fatalism and despondency may be completely wiped out.

Actually the problem of India's masses can be reduced

to the crisis of leadership. Our leadership, as it exists today, is hardly in a position to cope with the situation. It is old and weak. A new leadership in every town and village, in every State and ultimately in the whole country must be evolved by the people, if the present impasse is to be removed. Let us hope that will be possible of the genius of the Indian people.

CHAPTER VIII

LAND TENURE SYSTEM

Of the various factors that contribute to the well-being or otherwise of the agricultural industry, the system of land tenure is by far the most important. The term "land tenure" stands for the system of rights and obligations of the members of the rural community in relation to the landlord and state. It refers to the terms or conditions upon which land is held or possessed ; it defines that legal relation in which the holder of any land stands to the Government or any other superior landlord. In brief, the system of land tenure relates to the question of intermediary interests, land utilisation and distribution of farm income.

Obviously that system of land tenure is ideal which provides for (i) maximum utilisation of land in the general interests of the community, (ii) most efficient cultivation and progressive farming, (iii) fair distribution of farm income, (iv) opening up of opportunities for a further development of peasants' personality, and (v) peace and social progress in the country-side. The cultivator will have the incentive to produce more and better only when he enjoys security of tenure and is assured of fair return for his labour. So a land system to be ideal must allow for both security of tenure and fair return for labour. At the same time it should be so designed

as to promote the well-being of the whole man and to subserve desirable social ends. Certainly social values must not be sacrificed for the sake of economic efficiency.

For the past few years the various State Governments in our country have been carrying out land reforms in their respective territories with a view to make agriculture efficient and progressive and also to create new social values. But before we study these reforms, it will serve as a good background to know the main features and defects of the prevalent land systems before the introduction of reforms as also the various alternatives that can be suggested in this connection.

II

Main Land Tenures of India before the Reforms

Broadly speaking, the land in most parts of India before the recent agrarian reforms was held in one or other of the three major systems. These were (i) the Permanently Settled Estate System, (ii) the Temporarily Settled Estate System, and (iii) the Ryotwari System. The permanently settled estate system covered nearly 25 per cent of the area. It prevailed in most parts of Bengal and Bihar, about one-half of Orissa, about one-third of Madras and smaller parts of Assam and Uttar Pradesh. The temporarily settled estate system accounted for 39 per cent and prevailed in Uttar Pradesh, nearly the whole of Madhya Pradesh (but not Berar), about one-fourth of the State of Orissa and in some areas in the States where the permanently settled estate system prevailed. The ryotwari system, which covered about 36 per cent of the land, prevailed in the rest of the country.

The broad distinguishing features of these three major land systems of the country were briefly as follows : The revenue was fixed in perpetuity under the permanently settled estate system, whereas it was revisable under the other two. Another well-known distinguishing feature was that while under ryotwari the land revenue was assessed on individual pieces of land and the actual occupant, who possessed a permanent and heritable right of occupancy, was liable for its payment ; under the permanently and temporarily settled estate system, the unit of assessment was the "estate" and the holder of the estate (commonly called the proprietor), and not the actual occupant of land, was responsible for the payment of land revenue.

In this connection, it is necessary to refer to an essential common feature of all the three major systems. There was in respect of every individual piece of land a person known as occupancy-right-holder. He held the land on a permanent and heritable tenure and generally also possessed the rights of transfer. Under the ryotwari system the occupancy-right-holder paid land revenue to the Government, while under the other two systems he paid rent to the proprietor of the estate. Both the payments were similar in character in the sense that they were not determined on a purely contractual basis. Generally speaking, occupancy-right-holders, instead of cultivating lands themselves, used to lease their lands to tenants and they, in their turn, to sub-tenants on terms which inhibited efficient cultivation. Thus not land but man behind the plough used to be exploited.

III

Defects of these Systems

Under all the existing land systems small holdings were the rule, large holdings were relatively few in number. There was to be found a strong tendency, which was directly relatable to the rights of inheritance and transfer of land, to a progressive diminution in the size of holdings and their fragmentation. This increasing sub-division and fragmentation of our agricultural holdings constituted as one of the principal defects of our land system. It stood in the way of proper utilisation of land, leading to poverty of the soil and poverty of the cultivator.

Further, and that is even more serious, there was the great evil of sub-letting. This evil was not confined to any particular system ; it was universally present, though in differing degrees, in all the different forms of our land system. Taking the country as a whole, about 80 per cent of the land was cultivated by farmers who did not own the land. In other words, four-fifths of our land was in the hands of absentee landlords who were simply rent-receivers. They did not themselves attend to cultivation but gave their lands on lease to tenants for purposes of cultivation. In many cases the tenants also did the same thing, sub-letting the lands to others. Thus there grew up a large number of absentee landlords and intermediaries between the actual tiller and the State who extracted income from land without performing any useful function.

Although the terms of tenancy varied, it was generally based on the crop-sharing system. The tenant had to bear himself all the expenses of cultivation and was

usually required to pay over 50 per cent of the gross produce as rent. Obviously in a country of small holdings, such high proportions of rent-payments were excessive. Certainly this amounted to rack-renting. More often than not, the portion of the produce that remained with the tenant after meeting the expenses of cultivation and payment of his rent, used to be simply insufficient to maintain him and his family. No wonder then that he remained so poor ; and being poor, he lacked the means to effect improvements on his holding or even to maintain the existing low fertility of the soil. This naturally hindered production and made agriculture backward. Not only this. Being rack-rented and unable to make both ends meet, very frequently he had to turn to the money lender for help,—a very costly help indeed, resulting in alienation of land and steady increase in the number of landless proletariats.

Further, under the existing arrangements the tenant, besides being rack-rented, had no security of tenure which, as pointed out earlier, is a condition precedent to efficient and progressive farming. In many cases the tiller was a mere tenant-at-will liable to ejectment at the sweet-will of the holder. Naturally, therefore, he had not the necessary incentive to make improvements of any kind. He was not sure whether he would be able to enjoy the fruits of his labour and capital investments. Certainly this was bound to hinder efficient utilisation of land.

The system of leasing would not have been so bad, if the landlords and occupancy-right-holders were to take interest in the cultivation of land, to exercise close

supervision over their tenants, and to assist them in carrying out improvements in agricultural operations. But actually barring some honourable exceptions, they did hardly any thing of this kind. They neither did any service to the land, nor to their tenants, although a great portion of the agricultural wealth went into their pockets. Thus as far as our agriculture was concerned, they were simply parasites, living on the exploitation of others. Obviously enough, a land system in which a large proportion of wealth from land went to maintain a parasitic class in idleness was unjust and incompatible with efficient farming.

Thus, in brief, our land system resolved into one where land was nobody's concern. The tiller had a depressed status. He was rack-rented and poor. He also lacked security. Consequently he had neither the means, nor the necessary incentive to effect improvements. At the same time the landlord, assured of high profits from cultivation through his tenants, felt satisfied and as such took little interest in extension of cultivation or in making improvements on land.

Viewed in this way the semi-feudal land system of the country was the chief cause of our agricultural backwardness. It had cramped both men and crops. It was economically inefficient, politically inexpedient and socially undesirable. Therefore from every view-point, it needed to be completely scrapped. Without this the successful reorganisation of agriculture was impossible.

Yet during the days of British regime, the Government did not do any thing to replace this out-moded semi-feudal land system in which land had virtually

become nobody's affair. Only some Tenancy Acts were passed in different parts of the country. But certainly they could not result in any significant improvement in the situation. Instead they gave rise to a system of dual ownership where the landlord was reduced almost to the position of a mere receiver of rent and yet the tenant was not the owner. Such a state of affairs was to nobody's advantage. As a matter of fact it invited more troubles. For instance, it created more bad blood among the people and encouraged class war in the country-side. Besides, the complexities of the tenancy legislation also led to more litigation between tenants and landlords where the latter, on account of greater ability and resources, inevitably proved to be the stronger party.

When the Congress Party came into power on the attainment of independence, the Congress Ministries started tackling this problem rather enthusisatically and also comparatively in a more comprehensive way. The emphasis now shifted from protecting tenants through tenancy legislation to the acquisition of the rights of landlords and intermediaries by the State. Abolition of the existing semi-feudal system now became the main objective. This was indeed to be welcomed for no half-measures could satistfactorily remedy the defects of our land system which needed complete scrapping.

Though it took more time than originally expected, *Zamindari* has been abolished in Uttar Pradesh, Madhya Pradesh and Madras, and it is in the process of abolition in Bihar, Assam and Orissa. Legislation for the abolition of *Jagirdari* has also been enacted in Rajasthan, Madhya

Bharat, Hyderabad and Saurashtra. Further in States such as Bombay, Punjab and PEPSU elements of superior rights have been eliminated or in the process of elimination. Similar efforts are being made at other places as well. As a result of the elimination of these rights the State will be able to come into direct contact with the occupier of the land.

While the abolition of intermediary rights is no doubt a thing of great achievement in the field of land reform in the country during recent years, it needs to be remembered that what is of even greater significance is the future pattern of land system that is desired to be introduced in its place. Much of the success in this vital task of agricultural development will depend udon it.

IV

Alternative Systems

Now accepting that the existing system must go and in fact it is already going in its present form, we have to consider the vital question of what next ? Which system or systems should we accept in the place of those which are being scrapped ? While making a choice, we must see that the future pattern makes for the maximum utilisation of the resources in agriculture and the highest possible standard of living for the community. We must also see that the new system is so designed as not only to increase economic efficiency and create enough material wealth but also to "promote the well-being of the whole man and to create new social values suited to the genius and traditions of our country." In brief economic efficiency and creation of new social values should be our two-fold

objectives. Keeping this in mind, let us briefly examine the various alternative schemes.

Broadly speaking, the alternative schemes of organisation are : (i) State Farming, (ii) Capitalist Farming, (iii) Collective Farming, (iv) Peasant Proprietorship, and (v) Co-operative Farming. Since collective and cooparative farming and to some extent even peasant proprietorship have already been discussed in Chapter II of the book, here only a brief reference of them would be sufficient.

1. State Farming

Under this system land would be nationalised and managed by government officials. The cultivators would thus be reduced to the status of wage-labourers.

The only country where state farming has been attempted on a fairly large scale is U.S.S.R. In 1939 there were nearly 477 state farms. But the record shows that inspite of rigid control of the State over the entire economy, the State farms have not been a success. In his report to the seventeenth Congress of the Party in 1934, Stalin observed, "It must be admitted that they (State farms) still fail to cope with their tasks. I do not in the least under-estimate the great revolutionising role of State farms. But if we compare the enormous sums that State has invested in the State farms with the actual results they have achieved to date, we will find an enormous balance against the State farms."

It is extremely doubtful whether in our country the scheme of State farming, if put into practice on a fairly large scale, would prove commercially and otherwise successful. Of course it would not be very fair to say that State farms cannot be commercially successful, because

the incentive for efficient production would be weak both in the managers and in the agricultural workers. Such an argument is raised against every kind of nationalisation. But from that point of view in the modern industry also, the managers and workers are hired. They do not own the factories in which they work. Similarly in big capilalist farms, a number of paid managers and workers are engaged to run its various departments. Economic incentives can be provided even in state enterprises. This is borne out by the experiences of nationalisation in different countries of the world. However, in our country the record is not very encouraging. In many cases state farms have been models of reckless expenditure ; and if the pay of officials and other miscellaneous expenses be included, the cost of production would probably be too high.

Apart from this, state farming has many social and political implications which make it unacceptable to us on any large scale. The Constitution of free India guarantees to protect the institution of private property, whereas the system of state farming involves its complete abolition. Again, it will lead to over centralisation of powers—social, economic and political—, and hence will be incompatible with the democratic way of life to which we are now pledged.

Although large scale reorganisation of our agriculture on the basis of State farming will be unacceptable to us, the establishment of a number of State farms for purposes of experiment, growing good seeds, demonstration of improved methods to cultivators and such other

purposes will be a desirable policy. The areas which are being reclaimed offer a good opportunity for the establishment of State farms. The State with its vast resources can bring such areas under cultivation and thereby increase the volume of production.

2. Capitalist Farming

It has been suggested that after acquiring the property rights in land, the State may auction the land to private capitalists for scientific cultivation subject to certain conditions relating to minimum wages, conditions of work, etc. It is held that such a system will lead to the fullest utilisation of land resources, and if proper conditions are imposed, it will give good wages to labour and make for better housing and other amenities. It will also facilitate the growth of agro-industries in the country.

Yet the very basis on which the whole case is built is weak. It is very doubtful that a large number of capitalists will be ready to invest their capital in agriculture when industrial and commercial opportunities are available. This is very well borne out by our past experience. Leaving a few exceptions, hardly any interest has so far been shown by such landlords in reclamation of waste or development of their homelands. And even if we accept for a moment that private capital will be forthcoming in adequate amounts and that under proper safeguards the system will lead to improved land utilisation, it cannot gain our support for it will not be desirable from social and political points of view. Surely "a system that would deprive the agriculturists of all their rights in land, reduce them to the position of industrial labourers and

subject them to capitalist exploitation hardly deserves serious consideration."[1]

3. Collective Farming

The essential features of collective system, its organisation and also the reasons for its unsuitability as far as our country is concerned have already been discussed in detail. Here only a few words by way of summarising our already established case against the adoption of collectivisation in the country will serve the purpose.

Under collective farming, ownership of all land, stock and capital vests in the community as a whole. There is no private property in land and individual holdings are completely abolished. The work of cultivation is carried on the whole farm as one unit of organisation under a management committee elected from among the members. The committee lays down programmes of daily work, directs and supervises the performance of all agricultural operations. It organises credit, marketing, insurance etc. and also makes arrangements for special social services such as education, medical aid and recreation centres.

Members of the collective farm are treated as equals, but their wages are not necessarily equal. Wages are received according to the nature and extent of work done by them. The profits of the farm are generally distributed on the basis of wages earned by each member. In certain cases, however, both production and consumption are communal. In such cases a member shares in every-

1. Report of the U. P. Zamindari Abolition Committee Vol. 1, page 486.

thing provided by the farm—food, clothing, housing, etc—by virtue of being a member, and not in proportion to the work done by him. He works not with the motive of personal gain but from a sense of duty, for the well-being of the group as a whole.

Collective farming has been tried in different parts of the world notably in U.S.S.R., Mexico and Palestine. About its success opinions are sharply divided. This is partly because of ideological differences and partly because of the lack of adequate and authoritative data. Yet on the whole it seems safe to assume that it has achieved a fair measure of success.

But so far as we are concerned, it has little possibilities at any rate for some time to come. There are both constitutional and sentimental difficulties in its way. It involves complete abolition of the right of private ownership of land, a right which is highly valued and respected in the country. Even in the Constitution of free India, it has been recognised as one of the fundamental rights of the citizens of the country. In view of this it can be introduced only when it becomes a declared objective of State policy. But any such attempt to establish collectivisation is bound to be resented and opposed by the peasants as a class on account of the deep attachment to the ownership of land that is to be found in the country. And this becomes all the more justifiable in case the owners of factors of production in other sectors are left undisturbed. So the question of reorganising our agriculture on the basis of collective farming would arise only when all the sectors of the Indian

economy were transformed into a completely socialist system.

4. Peasant Proprietorship

The number of those who advocate peasant proprietorship as the future pattern of our agricultural economy is quite large. Under this system all intermediary rights in land will be abolished. The peasant will be the proprietor. He will possess a permanent, inheritable and transferable right in land. He will cultivate the land himself and pay the revenue fixed on his holding to the State. There will be direct relationship between the peasant and the State.

The arguments that are generally putforth in favour of peasant proprietorship can be summarised, as has been done by Prof. P. N. Driver, thus .

1. It will give maximum employment to the labour available.
2. It will bring about economic de-centralisation and provide an independent means of support to the majority of our producers.
3. It will preserve liberty and democratic rural society and also establish social stability and self-respect.
4. It will give the greatest possible yield per acre and maintain maximum soil fertility.
5. It will suit our social structure and satisfy the peasant's love for land.

The case for peasant proprietorship thus appears to be rather very strong. It has a great psychological and sentimental appeal in as much as it satisfies the peasant's

love for land. It provides the necessary incentive for maximum effort and efficiency. Yet it needs to be pointed out that in its pure and full-fledged form it will not be very helpful in the effective solution of our major agricultural problems. The most intractable feature of our agrarian economy is the small size of holdings occupied by the vast majority of our cultivators. As long as this feature continues, there can be no effective solution of the problem of low production and crushing poverty of the cultivators. But peasant proprietorship has no real remedy to offer for this. Reclamation of waste land and its distribution among uneconomic holdings will not help in increasing the size of holdings to any significant extent. Redistribution of large farms among small holdings will also not be of much help. And, as has already been shown, consolidation of holdings, whether on a voluntary or compulsory basis, can be no permanent and effective solution for uneconomic units unless the laws of inheritance are radically changed for which there is not much possibility at the present.

Further the provision of untrammelled right of transfer will stand in the way of the successful maintenance of peasant proprietorship. It is true that there would be fewer transfers as there would be no landlord with a right to eject his tenant, yet so long as land remains a marketable commodity, sale and purchase of land would continue to take place. Thus it would be difficult to prevent multiplication of holdings. And with small holdings, the necessary amount of capital and organisation would not be available for the development of agriculture.

Thus we find that peasant proprietorship has many advantages to its credit. But it can be successful only when it is carefully regulated and aided by the State. By law the State must adopt compulsory re-stripping operations so as to establish economic holdings. Further, the economic unit thus constituted has to be protected against further subdivision. This will necessitate changes in the law of inheritance. At the same time economic holdings will have to be non-alienable and sub-letting prohibited as a general rule. Even then cooperation in agriculture will be necessary to get the best out of planned peasant proprietorship.

5. Co-operative Farming

Finally we come to the system of co-operative farming. As has been amply demonstrated earlier, the system of co-operative farming offers a concrete solution for the fundamental problems of our agriculture. It provides for a re-organisation of our agricultural economy in the form of an efficient system of production. It offers an effective remedy for uneconomic holdings and enables the small farmers to reap the benefits of large scale farming, to effect economies in the cost of cultivation and realise the technical possibilities of increased production. And at the same time it is also likely to go down with our peasant community as it makes adequate provision for the ownership and inheritance of land.

Besides promoting economic efficiency, this form of organisation has the added significance in the fact that its growth is closely related to the training of the individuals in the art of self-government. It develops social

morality and also facilitates the change over from a capitalist to a socialist economy without the use of force or compulsion. It is indeed a peaceful rovolution in action.

It need not be repeated that there are many technical, financial and administrative difficulties in the way of the adoption and working of this system. Indeed the difficulties are bound to be very great during the initial stages. Yet the whole system is so well suited to the genius and traditions of the country that every effort need to be made, even if that be at the cost of some sacrifice to create conditions conducive to its establishment.

To sum up the discussion relating to the question of alternative systems, it may be said that perhaps there is no single system which can adequately meet the requirements of the situation. This is because the existing pattern of our agricultural economy is exceedingly complex and the problems facing it are many and varied. It will be, therefore, better to take into account the whole set of conditions obtainable in the country and adopt flexible land system or systems so that they may be evolved progressively out of the experiences gained through our experiments. In our view cooperatively regulated and organised peasant proprietorship will be a better alternative.

V

Recent Land Reforms

Bearing in mind the above discussion, let us turn to the recent land reforms in the country and see which way we are going. During the past few years, important land

reform legislations have been enacted in many States like Uttar Pradesh, Madhya Pradesh, Madras, Bombay, Rajasthan, Assam, Orissa, Madhya Bharat, West Bengal etc. The legislations are by no means uniform; in fact they vary a great deal from State to State. Yet there are some features which are common to most of them. As has been well summed up in the Draft Plan, these characteristics are:

(1) Abolition of intermediaries and under certain conditions, confirment of rights of proprietorship upon occupancy tenants;
(2) Protection of tenants-at-will; and
(3) Determination of a ceiling on future acquisition of land by individuals.

Let us briefly deal with these characteristics.

(1) The removal of intermediaries, who had long ago ceased to perform any vital economic or social function and had in fact become parasites and a great hindrance in the development of agriculture, is certainly a major achievement in the field of land reform during the recent years. A number of States have passed the necessary legislation for the abolition of intermediary rights, while some are still engaged in framing legislation for the same. For instance *Zamindari* has been abolished in Uttar Pradesh, Madhya Pradesh and Madras, and is in the process of abolition in Bihar. Legislation for the abolition of *Zamindari* and *Jagirdari* has also been enacted in Assam, Orissa, West Bengal, Rajasthan, Madhya Bharat, Hyderabad and Saurashtra. In States such as Bombay, Punjab and PEPSU the existing superior rights in land have been eliminated or in the process of being eliminated.

On gaining independence, the task of abolition of intermediary rights was taken up by the Governments very enthusiastically, and in fact it so looked in the beginning as if *Zamindari* and *Jagirdari* would disappear in no time. But it turned out to be otherwise. A number of difficulties,--financial, constitutional and administrative,—cropped up on account of which progress became painfully slow, so slow that some began to doubt even the intention of the Government. Certainly it has taken two much time. Over four years have passed and yet this task is not complete everywhere. Since the abolition of intermediary rights is the first step to any effective land reform, the necessary legislation should be enacted and implemented as early as possible. The period of suspense and uncertainty should always be short.

As a result of the elimination of intermediary rights and, under certain conditions, confirment of proprietory rights upon occupancy tenants which are in progress in many States, the land system over the greater part of the country is beginning to approximate in substance to the system of peasant proprietorship. The State has now come into direct contact with occupier of the land. This is advantageous both to the State and to the tenant. The advantage to the State consists in the fact that henceforth all future appreciations in the value of land will accrue to it, or will be shared between it and the tenants, assuming of course that the State will not allow the formation of new intermediary rights in the land in future. Moreover as the sole land lord, the Government will be in a much stronger position

than any private landlord in initiating schemes for agricultural development. And as far as the cultivator is concerned, the new arrangement is expected to benefit him in so many ways. It will give him the much needed feeling of security and the incentive for better agriculture. It will restore his self-respect and bring him hope and confidence. The fear of ejectment, forced labour and inferiority in social status will disappear. As such it will now be possible for the cultivator to take necessary interest in the development of agriculture and to plan his future with hope and confidence.

But surely these advantages will accrue only when with the abolition af *Zamindari*, the Government assumes new responsibilities which will not merely be confined to the collection of rent but will extend to the management of waste lands, forests, fisheries, etc. and carries them out effectively. For this purpose a good system of village records, and an efficient and honest revenue administration are indispensable. At the present, however, there is scarcely any revenue administration and village records are also wanting both in quantity and quality. This is a great hindrance in the way of implementing land reforms. Hence high priority needs to be given to the preparation of reliable village records, and to the building up of sound revenue administrations.

2. The position of tenants-at-will, who are to be found both in *raiyatwari* and *zamindari* areas, is highly weak and vuluerable. Some States, following the example

of the Bombay Tenancy and Agricultural Lands Act of 1948, have enacted measures for the protection of tenants-at-will. Though this has brought about some improvement, yet much remains to be done. Even now the tenants-at-will do not have the necessary protection over large part of the country. Some broad principles of protection, which have been adopted in some States and need to be adopted else where also after making due modifications to suit local conditions, are as follows :

(a) A tenant who has been cultivating for a prescribed period should be protected from ejectment except under certain conditions such as non-payment of rent, negligence in cultivation, etc.

(b) The tenants who, despite their long established tenancy, have been ejected by their landlords, should be re-instated after their claims have been examined retrospectively.

(c) The tenant should have the right to make improvements on land after giving due notice to the landlord, and in case his lease is to be terminated compensation should be paid to him for such improvements.

(d) The period of lease and the amount of rent should be prescribed by legislation. The tenancy should ordinarily be for a minimum period of five years and it should be renewable also resumption being permitted only when the owner himself wishes to cultivate. Regarding the amount of rent, it should be so deter-

mined that, having regard to the expenses of cultivation and other risks, a fair wage remains for the tenant. Although it is difficult to lay down a generally applicable maximum rate of rent, a rent exceeding one-fourth or one-fifth of the produce may be regarded as requiring special justification.

(e) Provision should also be made for the purchase of rights of ownership by the protected tenant at prices settled mutually or determined by revenue courts.

3. Another line of action that is noticeable in the recent land reform legislations in the country relates to the determination of a ceiling on future acquisition of land by individuals. This is designed to prevent the formation of large holdings and to offer greater scope to peasant owners and tenants to acquire additional land. The upper limit for future acquisition of land has been prescribed in some States. For example, in Bombay the limit has been fixed at 50 acres, in Uttar Pradesh at 30 acres, and in Hyderabad at 5 times an economic holdings.

While as a general principle the fixation of an upper limit to the amount of land that an individual may hold is sound and justifiable in public interest, its practical results need very careful consideration. It will raise important problems of finance, administration and management which, under existing conditions and set up, will be difficult to tackle. Moreover, we should not forget that it is primarily the small and uneconomic holding, and

not the large holding, that lies at the root of many of the difficulties of our agriculture. In fact the main problem that confronts us in the field of agricultural development is how to bring about a substantial increase in the size of the unit of management for, as has been been well observed by the Planning Commission, ".....a larger unit of management can secure more credit and finance and can apply these to greater advantage, can diversify its economy and can make a relatively greater contribution to the solution of the country's food problem." We wonder if fixation of an upper limit will be of much help in this direction. Not much land will be available in this way for the purpose of enlarging the holdings of uneconomic owners. Moreover the land so acquired will, as a rule, consist of fields scattered over the whole village.

These are, in brief, the important aspects of our recent land reform legislation. Let us in this connection briefly refer to the land policy as laid down in the final Five Year Plan.

VI

Five Year Plan and Land Policy

Ample space has been devoted to land policy by the Planning Commission in the final Five Year Plan. According to it "The future of land ownership and cultivation constitutes perhaps the most fundamental issue in national development. To a large extent the pattern of economic and social organisation will depend upon the manner in which the land problem is resolved." The land policy must be viewed in a broad and compre-

hensive way. It should be so framed that on the one hand, it helps in achieving the targets of agricultural production which are central to the success of the Plan and, on the other, it "reduces disparties in wealth and income, eliminates exploitation, provides security for tenant and worker and finally promises equality of status and opportunity to different sections of rural population."

Although land policy, in the main, has to be worked out in terms of local needs and conditions, it is necessary to have a broad and common approach in land reform. As such the Plan proposes that the Central Government and the States should work out the stages in which land reforms are to be carried out.

Proposals for land reform in the Plan are made with reference to the principal interests involved in the land, *viz.* (1) intermediaries, (2) large owners, (3) small and middle owners, (4) tenants-at-will, and (3) landless workers. At the same time the Plan desires that "the effects on production of each measure that may be proposed have to be foreseen and provided for." It is hoped that as social and economic adjustments affecting different interests come into effect, a new social structure will get evolved in the place of old.

While reviewing the recent land reform legislation, we noticed that in some States intermediary rights have been already abolished and in some they are in the process of abolition. The Plan approves of this highly necessary and desirable step. It rightly emphasises the necessity of paying adequate attention to two principal problems, *viz.* (i) payment of compensation to

Zamindars and *Jagirdars*, and (2) establishment of proper revenue administration.

Regarding large or substantial owners, the Plan suggests the fixation of an upper limit to the amount of land which an individual may hold. While the limit is to be determined by each State in the light of its own agrarian history and present problems, broadly speaking, according to the Plan, about three times the family holding may be considered a fair limit for an individual holding. A family holding has been defined "as being equivalent, according to the local conditions and under the existing conditions of technique, either to a plough-unit or to a work unit for a family of average size working with such assistance as is customary in agricultural operations."

With regard to small and middle owners, "the general aim of policy should be to encourage and assist them to develop their production and to persuade them to organise their activities, as far as possible, on cooperative lines." The Plan recommends that in all States programmes for the consolidation of holdings should be expanded and pursued with vigour, and secondly each State should fix a minimum limit for sub-division of holding.

The Plan also contains recommendations for the protection of tenants-at-will. It is suggested that the tenancy should ordinarily be for five to ten years and should be renewable, resumption being permitted only if the owner himself wishes to cultivate. And the rent should be so fixed as to enable the cultivater to get a

fair wage after meeting the expenses of cultivation. Ordinarily a rate of rent exceeding one-fourth or one-fifth of the produce could well be regarded as requiring special justification.

Landless workers, however, are not likely to benefit much by schemes of land distribution because in any scheme of distribution or settlement, the first claim will naturally be that of tenants. "In view of this difficulty, the contribution which the movement for making gifts of land, which has been initiated by Acharya Vinobba Bhave, has special value for it gives to the landless worker an opportunity not otherwise easily available to him."

So far as the ultimate objective is concerned, we are advised "to work towards a concept of cooperative village management so that the village may become a vital, progressive and largely self-governing base of the structure of national planning and the existing social and economic disparities resulting from poverty, caste and status may be obliterated." This will have to be evolved gradually by village communities out of the practice of cooperation and according to their needs and problems. The Government, however, can do much in this direction through guidance, assistance and legislation.

Finally, the Plan recommends "the establishment by the Central Government of land reforms organisation which will be concerned with the evaluation of land reform programmes, investigations into land problems, study of the experience of cooperative farming in different parts of the country, collection of accurate data and the maintenance of a continuous record of information con-

cerning the progress of land reform programmes adopted by the States."

Conclusion

We have now reached the concluding stage of the essay. We have examined in preceding sections the existing land system that is being abolished, the possible alternative systems, the recent land reform legislation and the recommendations of the Planning Commission regarding the future land system. Bearing in mind our past history, our special needs and problems, we feel that the land policy as outlined in the Plan is sound, realistic and feasible. The Plan rightly recommends peasant proprietorship mixed with a system of cooperative village management. The provision of peasant ownership will make the system acceptable to the peasants who constitute the backbone of our agriculture and are the country's most efficient cultivators. And it needs no emphasis that any scheme which is not capable of proving acceptable to them is not likely to bear any fruit. Certainly in the task of agricultural reorganisation and development, we must have the peasants with us and not against us. But, as pointed out earlier, peasant proprietorship by itself will not be of much help. It will leave many agricultural problems in tact. To overcome these and thereby pave the way for agricultural progress, the Plan has suggested the establishment of cooperative village management. This will not only provide a large unit for agricultural operations which is so essential today, but will also render possible the utilisation of land and other resources of the village from the stand-point of the

village community as a whole.

This whole system will have to be evolved gradually by the village communities through a series of trial and experiment. It is, therefore, necessary to watch carefully the working of the various steps that are taken with a view to make improvements in future. To be dogmatic or blindly imitate what has been done elsewhere will not at all be wise.

CHAPTER IX
OUR FOOD PROBLEM

The Urgency of Solution

Of all the problems, economic, social and political, with which the country is confronted to-day, the most vital is the problem of adequately feeding the people. For food is the primary need without which freedom is meaningless, nay life itself is impossible. A careful study of the past will reveal the fact that metabolism has been the main spring of high politics. The terrors and splendours of history are, in a way, stories of food. For instance, there is considerable justification in saying that, "had the feeding arrangements of Bourbon France given satisfaction, the Bastille would probably never have been stormed, or had the steppes of Central Asia been able to feed all their rapidly breeding tribes, neither the Aryan nor the Moghul invasions of India might have occurred." As such there is no dis-entangling of this theme from the future politics and economics of a country. The link between diet and destiny is, indeed, very close and direct,—a link which the leaders of India can ill afford to ignore.

The solution of India's food problem, chronic and grave as it has become, is urgent from every point of view. It is seriously affecting the life and efficiency of both the present and future generation. Food shortage causes not only certain specific diseases, but by lowering resistance

and vitality leads to the prevalence of a large number of diseases and epidemics. The general depression of health, lack of efficiency of work, morbid state of mind, apathy etc., are some of the inevitable effects of the lack of adequate food. In the presence of all this, India can never hope to become a first rate nation.

An early solution of the food problem is also necessary in view of the fact that it is causing a very severe drain on the country's limited foreign exchange resources. In order to meet the food shortage, we have been importing food from the surplus countries of the world on a very large scale involving expenditure in hundreds of crores of rupees. The table below indicates the huge sums spent on the imports of foodgrains from abroad.

Year	*In million tons*	*In crores of rupees*
1946-47	2·25	88
1947-48	2·33	100
1948-49	2·84	130
1949-50	3·71	148
1950-51	2·13	80
1951-52	4·72	216
1952-53	3·90	132

The total cost of imported grains since 1948 works out to over Rs. 750 crores. This sum of Rs. 750 crores may be contrasted with the benefits of multi-purpose projects, 23 of which would have cost only Rs. 385 crores and would have yielded 2·7 million tons of foodgrains and 1·7 million k. w. of cheap electricity annually. Again, a part of this huge sum has been spent in terms of dollars which are so urgently required for financing the import of capital

goods and heavy machinery. This expenditure of dollars is apart from the import of two million tons which was financed out of U. S. wheat loan.

It is evident, therefore, that so long as this problem of food exists, the balance of payment position is likely to remain precariously poised and the budgetary position of the nation will continue to show signs of strain. Moreover, considerations of defence and prestige also demand that we cease to look to other countries for food.

The urgency of food problem has received adequate attention from the framers of the Five Year Plan. The Plan says that "a well-defined food policy for the period of the plan is an essential condition for the successful implementation of the Plan." We will discuss the measures proposed in the Plan for solving the crisis of food shortage at a later stage. Meanwhile it will be worthwhile to refer briefly to the history of the present crisis.

II

The Present Food Crisis

The problem of food shortage in the country began to attract public attention only after the great Bengal Famine of 1943 when millions passed away within a few weks from under nourishment to extreme starvation. Prior to this, neither the State nor the public gave any thought to it. Although even before 1939 many experts pointed out that there was not enough food in the country and that as much as 61 per cent of the people were either "poorly" or "very badly" nourished, the problem was not given any serious consideration in any quarter. The Bengal Famine Commission reviewed all the long

and short term factors which had resulted in the food crisis of 1943 and came to the important conclusion that there was a real food shortage in the country.

Many doubted this observation of the Commission and even now there are some who are not fully prepared to admit the fact of real food shortage in the country. Generally it is pointed out that as India is mainly an agricultural country and over 70 per cent of the people are agriculturists, it is impossible for the country to run short of food under normal conditions. Prior to 1939, we are told, there was plenty of food in the country. One who had money could purchase any amount of foodgrains in the country. As such if there was any famine, it was a famine of money and not of food in India. Again, our attention is drawn to the fact that the country used to export certain quantities of foodgrains before 1939 which show that there was surplus of foodgrains in the country. Hence it is argued that the present food crisis owes its origin to certain war-time and post-war factors.

But this is not a correct analysis of our food problem. The existing food crisis in the country is certainly not a temporary phenomenon. It is a chronic problem. It is the symptom of economic backwardness, and it has its roots in the primitive character of our agricultural economy.

Perhaps only in 1880 we had a doubtful surplus of 5 million tons of foodgrains. This follows from the statement of the Famine Commission of that year which placed the output of foodgrains at 52 million tons and consumption at 47 million tons. But this surplus vanished

in course of time as the population grew and the food production lagged behind. We find the Prices Enquiry Committee in 1914 emphatically declaring that "population has increased by a larger percentage in the period under enquiry (1890—1912) than either the total area under cultivation, or the area under food-grains; or in other words, the requirements of food-grains for internal consumption have increased in a larger proportion than the total production of foodgrains."

So it follows that even before the first World War, India was no longer self-sufficient in foodgrains. And as is well-known, the growth of population after the First World War has been more rapid than it was before. The result was that before the Second World War broke out, India was a net importer of foodgrains to the extent of 1·5 million tons. 'This shortage of foodgrains cannot be solely accounted for by the growth of population; quite a major share goes to the declining production and separation of Burma. The following table shows the comparative growth of population and food supply in the country during the past few decades.

Year	Population in millions	Sown area in millions	Foodgrains in million tons
1911—12	231·6	150·5	.....
1921—22	233·6	158·6	54·3
1931—32	256·8	156·9	50·1
1941—42	295·8	156·5	45·7

The following estimates made by Dr. W. Burns

clearly indicate how the acreage per head under food crops has steadily declined.

Year	Acreage per head under food crops
1911	0·83
1921	0·86
1931	0·79
1941	0·67

The decline in acreage per head under food-crops might not mean a smaller food supply per head, if it had coincided with an increase in the yield of crops, which unfortunately instead of going up actually declined. This is borne out by the following table.

	Area under chief food grains and pulses (million acres)			Yield of food grains and pulses (million tons)		
	Rice	Wheat	All food grains and pulses	Rice	Wheat	All foodgrains and pulses
1929-30	66·5	24·7	155.9	25.5	8·9	49·1
1939-40	70·1	26.1	158·2	24·6	8·9	47·2
% increase (+) or decrease (—)	+5·6	+5·7	+1·5	—3·7	....	—3·9

These statistics clearly show that despite an increase of 1·5 per cent in the area under foodgrains during the decade 1930-40, there was a net decrease of nearly 4 per cent in the total production of foodgrains, while the population increased by over 15 per cent.

Along with a progressive decline in the quantity of food in relation to the population, there also occurred a growing deterioration in the quality of foodgrains. During the first 40 years of the century, the production of rice and wheat, which are more nutritive, steadily decreased in relation to the production of inferior cereals such as jowar, bajra, barley and maize. The following table gives the index numbers of production of chief cereals between 1910—38.

Relative Expansion of Less Nutritive Cereals

Cereals	1910-15	1915-20	1920-25	1925-30	1930-35	1935-38	1910-38
Superior cereals							
Rice	100	114·0	108·4	107·2	110·2	103·5	+3·5
Wheat	100	96·2	93·4	93·3	97·8	104·2	+4·2
Inferior cereals							
Jowar	100	157·4	167 0	210·8	207·1	209·7	+109·7
Barley	100	224·2	202·6	172·2	173·4	157·1	+ 57·1
Bajra	100	140 0	105·0	126·0	125·0	125·0	+ 25·0
Maize	100	114·0	100·0	106·0	112·0	105·0	+ 5·0

It is thus evident that during the period 1910-1938

while the production of such cereals as rice and wheat increased only by 3·5 and 4·2 per cent repectively, jowar increased by 109·7 per cent., barley by 57·1, bajra by 25, and maize by 5 per cent.

Such was the distressing food situation in the country before the beginning of the Second World War. A revealing picture of the normal food shortage in the country and the extent of suffering to the people resulting therefrom is very well given by Sir John Megaw in his report based on investigations conducted by 600 doctors under his direction. The investigation showed that only 39 per cent of the people were adequately nourished, 41 per cent were "poorly nourished" and the rest 20 per cent came under the category of "very badly nourished." From the same report, we also find that in 40 per cent of the villages, the population was excessive in relation to the food supply and that the periods of famine or food scarcity occurred in one village.out of every five during a ten year period in which there was no exceptional failure of rains. The Bengal Famine, in which millions of people died within a few weeks, gave a tragic proof of the correctness of the above survey.

Now, a word about the much advertised bogey of India's exports of foodgrains before 1939 which is taken as an index of surplus food supply in the country. It is, of course, true that India used to export a certain quantity of foodgrains prior to 1939. But in this context we should bear in mind two relevant things. First is the relation of the exports to total production. In 1938—39 wheat exports represented 2·8 per cent of the total crop

production in the country, while the ratio of rice exports to total production was only 1·2 per cent. Thus it is evident that, if at all any surplus position was indicated by these exports, it was very nominal. Any slight increase in internal demand or a variation in crop production was enough to wipe out the surplus altogether. Moreover, these exports mostly occurred when the world prices were very tempting. This shows that there was no permanent surplus which sought an outlet at any price. Secondly, we must take into account the imports of foodgrains into the country. While India exported 742,000 tons of foodgrains in 1938-39, she imported 1,603,000 tons of food from abroad. During the five years ending 1941-42, the average annual net imports amounted to over 1,000,000 tons. In terms of money, India was spending more than Rs. 13·5 crores a year on buying food from abroad.

To sum up the position so far, it can be stated that even before 1939 striking deterioration was taking place in our food situation, both quantitatively and qualitatively. Food deficit was steadily increasing. About 30 per cent of the population did not get enough to eat, while a much larger section of the population had to be satisfied almost invariably with ill-balanced diet. In a word, permanent under-feeding and periodic starvation were normal features of our economy even before 1939. The poor physique of the people, the high death rate, the heavy infant and maternal mortality, the low expectation of life, the wide prevalence of deficiency diseases and such other features bear ample testimony to the seriousness of food situation in the country.

For obvious reasons, the problem took a sudden turn some time after the coming of the Second World War. On the one hand, the demand for foodstuffs increased considerably, and on the other, the supply position worsened, partly on account of the cessation of the foreign imports owing to the occupation by Japan of Burma, Malaya and other East Asiatic countries, and partly due to hoarding by cultivators and merchants in the country. Naturally, the problem of food became very grave. The Government, in addition to other measures, launched a "Grow More Food" compaign in order to increase the production of foodgrains in the country. But the actual achievements unfortunately did not come any where near expectations. The effort was inadequate and even the necessary vigour and drive were lacking.

Our food problem, which was becoming increasingly acute day by day, worsened still further with the partitioning of the country. As a result of partition, India was left with 82 per cent of the population, but it could get only 68 per cent of total acreage under rice, 65 per cent of wheat land, 77 per cent of cotton land and that of jute only 23 per cent. This meant still greater pressure on land, increase in food deficit, and also weakening of our position in respect of earning foreign exchange resources.

The above discussion clearly leads us to the conclusion that our food problem is a manifestation of the continually increasing pressure of population on food supply, and not a temporary disequilibrium between demand and supply. As such it can be effectively tackled only through relatively long-term measures.

Short-term expedients will not take us far.

Bearing this in mind, let us briefly review the food policy of the Government.

III

Food Policy of the Government

Upto the first two or three years of the second world war, the Government had, for all practical purposes, no food policy. The situation was allowed to deteriorate till it culminated in the disastrous Bengal Famine of 1943. It was only then that the Government was jerked into action and some measures began to be adopted. Soon after the Food Department was created under the supervision of which the "Grow More Food" (G.M.F.) campaign was launched. Price control and rationing were instituted by the end of 1943 which worked all through the war years with doubtful efficacy. Ceilings were fixed for almost all food prices. Food rationing which started on a restricted scale in the beginning was gradually extended until by the end of war more than one-third of India's population were under statutory rationing of one kind or the other. To cover the deficit food also began to be imported on an increasingly large scale.

Yet inspite of these efforts, the situation did not improve. Food prices jumped up by 300 to 400 per cent during this period, and a good deal of black marketing, hoarding and profiteering flourished. This caused great resentment among certain leaders, particularly Mahatama Gandhi who held that controls were making the people corrupt. Moreover, it was also

thought that controls were acting as a deterrent to increased production and thereby were causing artificial scarcity in the country. On their removal, it was argued, production would increase and prices would ultimately come down.

Mainly on the insistence of Gandhi ji controls on food were lifted in 1947. But Soon after that the country witnessed a sharp rise in the food prices through out the country. The inflationary spiral received a fresh impetus under the stress of which economic situation in the country began to deteriorate fast. This ultimately led the Government in September, 1948 to reimpose food controls and restore the old order of rationing, compulsory procurement and food imports.

Self-sufficiency Programme

It was obvious to the Government from the very beginning that imports could not be a solution to the problem. The only way out was to grow more food in the country. It was for this reason that the G.M.F. campaign was started. But in the midst of emergency conditions created by the war and on account of lack of proper planning and inefficient administration, the campaign could not bear any fruits during the war period. After the war it was launched with greater vigour and it was given a planned content. In 1947 a five year plan to raise food production was drawn up and put into operation. Early in 1949 the Minister for Agriculture announced a revised plan to make India self-sufficient by the end

of the crop year 1951. Imports were to stop afte that date except to build up a central reserve or t meet an emergency caused by a wide spread failur of crops.

The plan envisaged an increase in the productio of foodgrains by 4·8 million tons which represente the estimated food deficit in 1952. Of this amount, 3 lakh tons were to be grown through intensive culti- vation, 3 lakh tons by reclamation of waste land, 2·8 lakh tons through tube-well irrigation and anothe 2·3 lakh tons by diverting a certain part of the acreage under sugar-cane to foodgrains.

For the effective implementation of the self-suffici- ency programme a requisite administrative machinery was created. A Food Commissioner with wide powers was appointed at the Centre. "The states too were asked to set up high powered committies to supervise the progress of the plan. The Collectors and Deputy Commissioners were entrusted with the work of imp- lementing that plan in the districts and their efficiency was to be judged on the basis of their food produc- tion work. To enlist the cooperation of agriculturists, farmers' unions were organised in rural areas."[1]

Besides setting up the requisite administrative machin- ery, liberal financial arrangements in the form of loans and grants were also made. The Government of India agreed to bear 50 per cent of the cost of improvement schemes implemented by the States, and in case of certain

1. More from Mother Earth—Publication Division, Government of India, page 6.

States—West Bengal, Punjab, Orissa and Assam—the entire expenditure on development schemes was to be reimbursed by it.

On the whole the scheme of the Government was not too much ambitious ; it was capable of achievement provided the active cooperation of the peasant, people, administration and the Providence was forthcoming in reasonable measure. In fact it was on the basis of actual realisation of the scheme for increased production that the Government decided to fix the import target for the year 1950-51 at 1·5 million tons which was 2·2 million tons less than that of 1949-50. The reduction in imports was expected to be made up by internal production estimated at about 2 million tons in the year 1950-51.

But how this food self-sufficiency plan ended is borne out by the following figures taken from the final report of the Five Year Plan.

Foodgrains Production

(In Million Tons)

	Rice	Wheat	Millets	All cereals
1949-50	22·8	6·5	16·2	45·2
1950-51	22·1	6·7	15·4	44·2
1951-52	22·8	6·2	15·4	44·4

From this we find that in 1951-52 which was the last year of the food self-sufficiency plan, production of all cereals was even below that of 1949-50 and imports reached record heights. So we were no where near the food self-sufficiency objective and the plan had virtually failed.

The Government attributed this failure to natural

calamities like drought, floods and locust invasions. But this could not be a complete explanation, for floods, droughts etc. were not the special features of that period only. They are a normal feature of the agricultural economy of our country. Hence its explanation, in the main, is to be sought elsewhere.

The achievement of self-sufficiency required three things : (i) building of adequate reserves, (ii) having a uniform system of rational utilisation of all produce available within the country, and (iii) progressive cuts in import quotas.

Actually this process was reversed. The Government wrongly cut down imports without first building adequate reserves. Further, the successful completion of the whole programme was mainly dependent upon the enthusiastic cooperation of the peasant. He was the key to the problem. But not much was done to ram this conclusion home. The ultimate benefits of grants and loans made by the Central Government to the States to promote the expansion of food production did not adequately reach the final end (peasant), probably due to lack of administrative cooperation and integrity. Again, it was too much on the part of the Government to have embarked upon the policy of self-sufficiency in cotton and jute, in addition to the existing declaration about self-sufficiency in foodgrains. The expert opinion laid stress on the promotion of self-sufficiency in the short period either in food or in cotton and jute at a time and not simultaneously. But the Government did not pay much attention to it,

No wonder then that achievement in either direction remained far below expectation. Yet again, to some extent lack of proper planning and defects in administrative arrangements were also responsible for the poor achievements of the scheme. Perhaps it would not be unjust to say that often the scheme was "directed with more attention to publicity and glamour than to solid results."

The G. M. F. Enquiry Committee attributed the failure of the G.M.F. campaign to principally two reasons. Firstly, it was too narrow and restricted in its scope. Secondly, the whole scheme was never given a permanent content, whereas temporary hazards were to a large extent beyond control. Further according to the Committee, it touched only a fringe of the population and had no appeal to the millions of small farmers. Lastly, the State Governments could not act upto expectations on account of there being no coordination to ensure a proper linking of short-term measures with long-term planning.

IV

Five Year Plan and Food Policy

Let us now turn to the food policy as outlined in the Five Year Plan. The Planning Commission has rightly laid great emphasis on this problem. It says: "A well-defined food policy for the period of the Plan is an essential condition for the successful implementation of the Plan. For the large sections of the community which live near the margin of subsistence, a certain minimum supply of foodgrains at reasonable prices constitutes the rock-bottom of the standard of living, a fall in which would be seriously detrimental to health and efficiency."

According to the Plan the aim of the food policy "must be to increase domestic production, to secure an increase in the marketable surplus, to distribute the same as equitably as possible and to eliminate by the end of the Plan the need to import foodgrains."

The Plan envisages a target of 7·6 million tons of additional food production by the year 1955-56 which means an increase of 14 per cent. This target of 7·6 million tons of foodgrains would roughly comprise about 4 million tons of rice, 2 million tons of wheat, 1 million tons of gram and pulses, and 0·5 million tons of millets. This programme consists of two parts, namely (a) schemes of State Governments which together account for a total net food production target of 6·0 millon tons to be achieved at a total cost of Rs. 125 crores; and (b) supplementary schemes proposed by the Planning Commission with a view to achieving additional tood production of at least 1·6 million tons".

The increase of 6·5 million tons through the schemes worked out by the State Governments is expected to be achieved in the following manner :—

	(million tons)
Major irrigation works	2·01
Minor irrigation works	1·78
Land reclamation and development	1·51
Manures and fertilisers	0·65
Improved seeds	0·56
Total	6·51

The supplementary programme, which will bring in

additional 1·6 million tons, consists of the following items :—

	(In Crores)
(1) Additional provision for minor irrigation works	30
(2) Additional programme for construction of tube-wells	6
(3) National Extension Organisation for intensive area development	3
(4) Supplementary allotment for Grow More Food during 1952-53	10
(5) Community Projects, including 55 projects already initiated	90
	139

It is expected that at the end of the Five Year Plan the area under food crops will rise by 5·8 million acres. The future crop pattern will be more or less as given below:—

(Area in million acres)

	1950-51	1955-56
Rice	76·0	80·0
Wheat	24·0	27·0
Other cereals	93·0	90·0
Grains and pulses	47·2	49·0

A consolidated picture of food programme may be presented as follows :—

Targets of Additional Production 1955-56.

	(In'000 tons)
Part 'A' States	4838· 8
Part 'B' States	1460· 0
Part 'C' States	211·3
Total State Schemes	6510· 1
Supplementary Schemes	1600· 0

Grand Total (Gross target for Indian Union)	8110·1
Less on account of diversion to commercial crops (—)	500·0
Net target of foodgrains (Indian Union)	7610·1

These targets, if fulfilled, will make India self-sufficient in food. But that does not mean an end of the problem for population continues to rise at the rate of about 1·4 per cent per year. Moreover the existing level of consumption in India is very low. To provide, therefore, more and better food to the growing population, the planning must remain a continuous process involving an improvement in technique of agriculture and more intensive cultivation.

Regarding controls, the policy of the Plan is quite clear. According to the Plan, in a planned economy, food controls have positive functions "such as safeguarding the minimum consumption standards of the poorest classes, preventing excessive or ostentatious consumption by the well-to-do, and facilitating the country's programme of direct utilization of unemployed man-power for investment". That means according to the Plan, planning and controls must go side by side. For it says, "if 'food for all' is to be the effective basis of policy and if the investment targets in the Plan are to be adhered to, the basic structure of food control has to be kept intact during the period of Plan. It is our considered veiw that until the domestic production of foodgrains has been stepped up to the

extent of 7·5 million tons as envisaged in the Plan, the country cannot be considered to have an adequate and assured food supply. Controls might be relaxed.....after the target of additional production has been achieved and adequate transport facilities have been created to ensure the expeditious movement of foodgrains from one part of the country to another." Thus according to the Plan, controls are necessary and must remain at least for some-time to come. But in order that controls should work satisfactorily and may not become a dis-incentive to increased production, the Plan emphasises the need for clarity and continuity in policy, efficiency in administration and effective public cooperation.

A very important recommendation of the Planning Commission relates to maintaining an all-India outlook in respect of food controls. "As regards policy, the question has to be approached not so much from the point of view of the needs of particular States as from the over-all national point of view.....The aim of policy must be to secure from each surplus State the maximum it can make available to the common pool and to organise the procurement and distribution of grains in each deficit State so as to restrict its drawings from the central pool to the minimum necessary. It is evident that the responsibility for fixing procurement and issue prices and for coordinating the control policies of States must rest with the Centre."

Finally, the Plan emphasises the need for changing the food habits of the people. The need is felt more for rice-eating people because of world shortage of rice

and the high price that has to be paid for its imports. It is estimated that the shortfall in country's rice production is not more than 2 or 3 per cent which, in the opinion of the Planning Commission, should not be difficult to cover by substituting wheat or supplementary food in place of rice in the customary diet of the people. Food habits, no doubt, are difficult to change, yet the Planning Commission feels that "if the public is made aware of the cost involved as also of the undoubted benefits of a more varied diet, the necessary response could be secured."

These are, in brief, the broad outlines of the food policy as laid down in the Five Year Plan. The Plan commenced in 1951 and so by now over two years have already passed. It would, therefore, be better if we take stock of the situation and see what has been achieved so far.

Move Towards Decontrol

Towards the middle of 1952 a new orientation was sought to be given to the entire food policy by Shri Rafi Ahmad Kidwai, the Food Minister of the Government of India. He initiated a move for decontrol of food throughout the country with the exception of a few selected areas. With the removal of Government subsidy, the problem of keeping down the food prices arose. The Food Minister was of the view that the prices could be kept down by a freer movement of foodgrains and additional production as also by de-hoarding that would start in the wake of decontrol. He emphatically pleaded that the existing controls over movement of foodgrains and their prices

were acting as a deterrent to increased production. Moreover, available stocks in the hands of the Government were considered to be more than sufficient to meet any emergency that might arise. Further more, the crop-prospects in different parts of the country were also rather bright. So the Food Minister thought that it was the right time for reorienting the food policy. He attempted to rally opinion in favour of decontrol. He found a veritable champion in Shri Raj Gopalacharya, the Chief Minister of Madras. The issue was yet to be decided when a lead was given in Madras where statutory rationing was withdrawn as from the 15th of June 1952 and in its place cheap grain shops were opened. The State was divided into six zones and inter-district movements within these zones were permitted. Thereafter, statutory rationing was suspended in Bihar, U.P., Hyderabad, Mysore, Saurashtra and Madhya Bharat. Punjab is the latest addition to the list of those States which have accepted the policy of decontrol.

Reports about the working of decontrol are very conflicting. Some claim that food decontrol has not produced the desired result. It has benefited only the traders and the consumers have been hit hard. While according to others, the policy of decontrol has worked quite well. If scarcity still persists, they argue, it is not due to shortage of foodgrains but that of purchasing power, a problem that is of little relevance to the programme of achieving self-sufficiency. The Five Year Plan has tried to explain these changes in control measures as merely changes in food administration to suit changing

circumstances. It does not pass any final judgment on the relaxation of controls because the period is "too short to warrant any definitive judgment as to the effects of such relaxation. It proceeds on to say that "short-period movements in prices are inevitably subject to various influences, seasonal and others which might not be of significance in the long run. These trends have, however, to be carefully watched, and the machinery of basic controls has to continue so as to check any undesirable developments." As already mentioned the Planning Commission is very emphatic on this point that a change in basic policy can be considered only when a substantial and enduring improvement in domestic production and marketable surpluses has actually materialised.

The Food Minister claims that the country is achieving self-sufficiency in food very fast, if she has not achieved it already. According to him production of *Kharif* cereals including rice, jowar, bajra, maize and ragi for 1952-53 was 4 million tons more than the production of the previous year. Of this amount, rice alone accounted for 2·68 million tons. So he thinks that we need not import more than 1,50,000 tons of rice in the current year. And as Assam has already been converted from a deficit to a surplus State, the total imports this year (1953) are not likely to exceed 2·1 million tons. In fact Shri Kidwai regards even this amount of imports as unnecessary. According to him the requirements of wheat work out at 8 lakh tons, whereas we are importing 18 lakh tons under the International Wheat Agreement. He holds that the key to self-sufficiency lies in stepping up rice production. Increased

production of rice will diminish pressure on wheat and milo. He says, that the production of rice is increasing at such a pace that next year India will be able to "bring down the world price of rice by exporting Indian rice."

One does not know what to make out of all this because the two-year report of the Five Year Plan no where makes such claims. According to the report the "increased production potential" works out at 8·8 lakh tons in terms of foodgrains. Besides this, 2·7 lakh tons are estimated to have been produced as a result of major irrigation schemes. The jugglary of statistics and the deficiencies of Indian statistics are no doubt proverbial. But certainly we can at least expect that the same Government does not give two different statistics about such an important item as food. It only causes confusion and misguides the people.

Though we do not dispute the statistics given by the Food Minister, we wish he was a little less ostentatious. It is true that this year crops have been better but that should not blind us to the fact that Indian agriculture is even now very largely dependent on natural factors. Self-sufficiency in food is highly necessary and desirable for the country, but certainly self-sufficiency should be real and not statistical. Again, self-sufficiency in one or two years should not lead us to ignore the necessity of long-term self-sufficiency based on steadily improving consumption levels of a rising population. So the need for increased production and price stability should on no account be allowed to be side tracked by only one year's fortunes. Our endeavour should not only be to tide over

the present shortages but also to plan for the future, for we have a large and rapidly increasing population. This requires, besides a well-defined food policy, efficient administrative machinery and effective cooperation of all the parties concerned, a complete re-organisation of our agriculture for the existing food problem is essentially a problem of backward and under-developed agriculture. Re-organisation of agriculture will no doubt take sometime to bear fruits, but once it is put on its feet it will provide enough and better food for the people of this country.

CHAPTER X

AGRICULTURAL LABOUR

Increase of Agricultural Labourers

"The existence of large numbers of agricultural workers," observes the Planning Commission in the final report of the First Five Year Plan, "who lack sustained employment and frequently suffer from social handicaps is to be regarded as a source of serious weakness and even of instability in the present agrarian system". It is certainly a great danger spot in our rural economy and is the surest symptom of agrarian unsettlement in the country. In view of this it is very sad and worrying to note that not only the number of agricultural workers in the country is vast, it is multiplying fast. In 1882 it was 7·5 million. In 1921 it stood at 21·5 million and by 1931 it had reached the figure of 33·5 million. The number continued to multiply still further. In 1951 it jumped to 44·8 million,—a very large number indeed.

This continuous multiplication of the number of agricultural workers in the country has been brought about by the interaction of numerous forces. For instance, the decline of rural industry has led many artisans to become agricultural labourers. The increase in subdivision and fragmentation of holdings has also converted many peasant farmers into agricultural workers. In fact every "circumstance which has weakened

the economic position of the small holder has increased the supply of agricultural labourers,—the sub-division of holdings, the loss af common rights in the rural economy, the desire of collective enterprise, the multiplication of rent-receivers, free mortgaging and transfer of land, and the decline of cottage industries."*

II

Their Deplorable Conditions

This vast number of teeming millions in the rural areas present a sad spectacle of dire poverty and extremely low standard of living. The reasons are not far to seek. Agriculture itself in India is none too prosperous—in fact, if anything, it is almost unremunerative. If agriculturists themselves are poor, then agricultural labourers, who are to depend on the earnings of the agriculturists and are to be paid by them, cannot but be poorer still. In pre-war times, the average rate of remuneration for each worker per day used to be between two to three annas. At present, it ranges between Re. 1 to 1/4/-. Such earnings are extremely meagre, particularly in villages where opportunities for subsidiary incomes are conspicuously absent.

But that is not the whole cause of poverty and distress of agricultural labourers. Not only their remuneration is small, but also their employment is seasonal, and hence their earnings are intermittent. Agricultural labourers are employed only when there is a seasonal demand for their services. During off-seasons they have no work, and therefore no earnings either. It has been

*R. Mukerjee, Economic Problems of Modern India, Page 123.

calculated that agricultural labourers are employed for not more than five to six months in a year. The difficulties caused by unemployment and absence of earnings for half the year can easily be imagined.

Apart from irregular employment and low earnings, agricultural labourers also suffer from the disabilities of hard conditions of work. There are no fixed hours of work, and when employed, they are to work throughout the whole day. The methods of payment are also irregular and sometimes quite primitive. In many areas, the agricultural labourers are compelled to work in consideration of the money borrowed years ago. In some cases, agricultural labourers are in reality nothing but slaves whose services are commanded as a sort of hereditary rights. Some aboriginals in M. P. undertake to serve big landowners in consideration of the land they have received to build their huts on.

Obviously, this is a very unsatisfactory state of things, for agricultural labourers are not only poor but also serfs. In a way, they are worse than slaves ; for slaves are at least fed and looked after by their masters. But in the case of agricultural labourers, they are theoretically free men, but in practice they are bound in fetters of poverty and customs. They have no land, no regular employment, no literacy. Literally, they live on a starvation level. The houses they dwell in are extremely unhygienic. In many areas human beings and animals dwell in the same hut. Incidence of diseases is quite high, and when famines and epidemics break out, they fall an easy victim to clutches of death. During the Bengal Famine, it was found that

it was the landless agricultural labourers that recorded the highest figures for mortality. Agricultural labourers form the weakest link in the chain of rural economy and present a problem requiring urgent attention.

III

Need for Reform

But it is unfortunate that uptil now, not only nothing has been done to ameliorate their conditions, but also the problem has not received the measure of attention that it deserves. Hitherto, our interest and concern for the improvement of the conditions of labour have been confined only in the industrial sector. While much remains to be done, yet at least some thing has been done in that direction. There is a fair degree of consciousness among the industrial labour; there are trade union organisations, machinery for fixing wages and regulating conditions of work. A host of welfare legislations have, to some extent, improved their status and made tolerable their conditions of living.

As compared to all these, practically nothing has been done for improving the conditions of agricultural labour in India. This apathy and indifference becomes all the more glaring when we remember that the number of agricultural labourers is vastly greater than that of industrial labourers. The total number of labourers engaged in factories does not exceed 2·5 million, whereas the number of agricultural labourers is near about 45 million. It is true that any attempt to reform the latter is beset with numerous difficulties and will present problems which are exceedingly complex. For

one thing, unlike industrial labour, agricultural labourers are widely scattered and dispersed throughout the whole length and breadth of the country. The task of bringing them under any unified plan for re-organisation is highly difficult. That way reform in the conditions of industrial labour is much easier, for they are greatly concentrated.

Further, there is a certain degree of skill and mental awakening in the industrial labour, but the agricultural labourers are absolutely primitive, illiterate, and in many areas aboriginals. They are dominated by caste, creeds and crude beliefs. To break their century-old faiths and practices are by no means easy tasks. In some areas, wages and conditions of work are still governed by status and customs rather than by contract and competition. The caste leader plays a dominant role in the life of the community. He enters into contract with the landowner on behalf of his community for the work to be done, and other members give him implicit support. Poverty and ignorance do not enable these leaders to have any better deal in the bargaining, and in all cases, they are ruthlessly exploited. Sometimes they migrate from place to place in search of jobs, and their vagrancy adds further uncertainties to their already precarious mode of living. Agricultural labour is thus not only a poor and landless class, but in a way is also a rootless nomadic class.

Though reform is difficult, yet these very difficulties point out to the need and urgency for diverting our attention towards improving the condition of these millions of serf, or 'near-serf' population. The existence of such

millions of poor, landless, and rootless people is a source of veritable danger and forms a very vulnerable point in our social organisation. As it has been rightly put,"This landless class hangs about the country side, adds to the already existing inefficiency of agriculture and is a permanent obstacle to the introduction of better methods and the improvement of agricultural tools. It is this same class which, driven by starvation into the cities, lowers the wages of town-workers and impedes the rapid growth of trade unionism, housing improvement and civic amelioration.' Hence in view of all this it is absolutely necessary and desirable to take constructive measures to prevent the increase of landless class and promote the welfare of agricultural labourers. And this needs to be done as early as possible. Vested interests, apathy or indfference should not be allowed to cause any further delay, for delay is bound to sow the seeds of an agrarian revolution.

IV

Measures For Reforms

1. First of all, there is the need to divert the surplus agricultural workers from land and offer them employment opportunities elsewhere. This is necessary because agriculture is frightfully over-crowded on account of which there is a great deal of unemployment and under employment in this sector of the economy. Quite many people are redundant at the present, and many more will become so when agriculture will be reorganised on scientific lines, the urgency of which cannot be questioned. As such creation of secondary and tertiary employment opportunities which involves an increase in the tempo of

economic development is absolutely necessary. This is the only effective answer to the problem of unemployment and under-employment. And as far as those workers are concerned who are to remain in the villages, employment opportunities will have to be provided through extension of irrigation, intensive cultivation and establishment of subsidiary industries.

2. Next, it is necessary to constitute economic family holdings and place stringent restrictions on their mortgage and sub-letting. For "more than any thing else, it is the uneconomic character of holdings, subjected to a process of continuous subdivision which makes agriculture unremunerative and accounts for the increase of a destitute landless population."[1]

3. Efforts should also be made to settle on cooperative lines agricultural workers on newly reclaimed lands as also on culturable waste lands. The establishment of a system of cooperative village management will also considerably help in improving the relative status of the agricultural worker. For in that case "agricultural workers, who now work for individuals will, under Coopera tive Management, work for the village community. Workers engaged in the same type of work, whether they are engaged as owners or non-owners, will receive remuneration on the same principle so that the landless labourer's position in society will begin to change."[1]

4. Further steps should be taken to organise labour

1. N. P. C. Series—Land Policy, Agricultural labour and Insurance, page 128.

2. First Five Year Plan, A Draft Outline, page 101.

unions in the country-side to enable agricultural labourers to protect themselves from the relentless oppressions carried on by landlords, capitalists and even peasants. At the present, however, they are almost unorganisable and unable to put up any fight for the improvement of the economic and social conditions because of their utter poverty, ignorance, scattered character and absence of leaders from among themselves.

Besides this, regulation of hours of work and conditions of employment should also be kept in view. Maximum hours of work may be fixed for farm labourers, keeping in mind the needs of agriculture for specially prolonged hours of work in certain seasons.

5. Another desirable line of action relates to the fixation and enforcement of minimum wages for agricultural workers. This task, however, is beset with numerous practical and administrative difficulties. Customs govern an untold number of daily acts and usages in agriculture which cannot be quickly broken by legislation. Moreover, immense diversity is to be found in different areas in respect of the nature of contract between agricultural employer and worker, the amount and modes of payment of wages, the traditional privileges enjoyed by the workers, etc. Certainly it will take some time to standardise all these. Yet again, agricultural wages must bear relation to agricultural costs. Already our agriculture is almost unremunerative because of low productivity. A high rate of wages would add to the costs which would in the end be harmful for the agricultural workers themselves. Ultimately high wages follow from high productivity

which is possible only when labourers have improved in efficiency or productivity in land has otherwise increased. The problem of agricultural labour thus points out to the need for an over-all improvement in agricultural technique and increased yield from land. Though all this must necessarily take some time, a beginning in the form of minimum wages would go a long way in improving the conditions of living of agricultural workers. If not any thing else, it would at least help in focussing attention on this unfortunate and helpless class which has long been neglected and exploited.

6. Apart from the fixation of minimum wages, another urgent line of reform lies in freeing agricultural labourers from the clutches of money lenders. They have been the easiest victims of the rapacious greed of money lenders, particularly of roving, petty money lenders who thrive on the ignorance of their borrowers. While something has been done to lighten the burden of debt of the agriculturists, agricultural labourers have been left to their merciless fate. Arrangements have to be made for the effective tackling of this problem and thereby enable the agricultural workers to start on a cleaner slate. Without this, the minimum wage legislation will fail to achieve its purpose.

7. Yet another need is that of housing. Generally the workers are not the owners of the sites on which their huts are constructed. This makes them dependent upon the sweet-will of landowners. In fact for all practical purposes they become their slaves. It is, therefore, necessary to pay due attention to this problem. Generally

speaking, where the sites are the common property of a village, the sites should be given to the workers free of charge, and where they belong to individual owners the right of occupancy should be granted to the workers. Model houses need to be constructed for them with the labour of workers concerned and others of the village and also, as far as possible, local materials should be utilised.

8. Finally, reforms are urgently needed to free the agricultural workers from crude customs and creeds which have reduced them to the position of slaves. This state of affairs must end. The primitive customs which bind them to their landlords and money lenders and compel them to render "begar" or slave-labour must be replaced by freedom of contract and modern methods of services and payments. This requires, *inter alia*, education of the right type and legislative reforms.

These are some of the important measures for improving the lot of agricultural workers in the country. Let it, however, be emphasised that they themselves are too weak to fight for their rights and eliminate the parasites fattening upon them. It is only the organised might of the community that can come to their rescue. "By legislative authority, by executive action, by educative effort, they must be roused to the consciousness of their dues; must be strengthened and supported to struggle for realising them and so must be enabled to enjoy a decent standard of living which is denied them even more effectively than to the socially depressed classes."[1]

1. N.P.C. Series—Land Policy, Agricultural labour and Insurnce, page 40.

It is encouraging to note that of late some attention, though far from adequate, is being paid to this urgent problem. A comprehensive enquiry into agricultural labour conditions has now been completed by the Ministry of Labour in close collaboration with the State Governments. The object of the enquiry was to collect data on employment earnings, standard of living and indebtedness of agricultural workers with a view to enable the Central and State Governments to initiate protective and ameliorative measures.

The Minimum Wages Act has also been passed which requires the State Governments to fix minimum rates of wages for agricultural labour by the end of 1953. It is left to the option of States to fix minimum wages for such areas or for such classes of employment as they might consider feasible. Already the rates of minimum wages for agricultural workers have been fixed in 9 States including Punjab, U.P., Delhi and Himachal Pradesh. In some States draft proposals are under the consideration of the Governments concerned.

The Planning Commission has also laid great emphasis on the necessity of improving the conditions of agricultural workers in the country at an early date. The planners emphatically declare that, "it will be difficult to maintain a system in which, because of accidents of birth or circumstances, certain individuals are denied the opportunity of rising in the social scale by becoming cultivators and owners of land." The Plan contains the following useful recommendations for the welfare of agricultural workers:—

1. Enforcement of minimum wages for agricultural workers in low wage pockets, on larger farms, and in areas selected for intensive development ;
2. Grant of occupancy rights in house sites in existing villages and in village extensions, an effort being also made, wherever possible, to provide small allotments for kitchen gardens ;
3. The movement for gifts of land should be supported through special assistance for landless workers selected for the allotment of gifted land. Gifts of land should be made a permanent feature of rural development ;
4. Labour co-operatives should be organised to the maximum extent possible and they should be the agency for construction of local irrigation and other works ;
5. Blocks of newly reclaimed land as well as culturable waste land should be set apart, wherever possible, for the settlement on co-operative lines of groups of landless agricultural workers and of holders of small, uneconomic plots of land ;
6. Financial assistance should be afforded to co-operative groups of landless workers for such purposes as house-building, purchase of bullocks and implements and for ancillary industries for which they receive training ;
7. Special assistance by way of educational stipends for vocational and technical training should also be given, as is already being done in most of the States ;

8. Rural extension workers should be made responsible for attending to the problems of welfare and employment of agricultural workers equally with those of farmers and the obligations of the village panchayats for the welfare of agricultural workers should be specially emphasised.

Let us hope that these suggestions will be carried out and the conditions of the agricultural worker, who has so far been the residuary legatee of all woes, will steadily improve.

CHAPTER XI
FIVE YEAR PLAN AND AGRICULTURE

In the previous chapters we have discussed some of the intricate problems that confront Indian agriculture today. While discussing them, we have tried to suggest certain remedies and, wherever possible, the recommendations of the Five Year Plan have been scrutinised. Throughout the book, our emphasis has been to take an over-all view of our agriculture. Again, while analysing the numerous agricultural problems, we have tried to keep the secular trends of our economy in view. In the first chapter, while pointing out the difficulties of agriculture, we laid emphasis on the need to avoid a sectional approach. In this chapter we intend to discuss certain broad aspects of agricultural planning, mainly in the light of our first Five Year Plan.

At the very outset we feel it our honest duty to appreciate the realism of the Five Year Plan. Our planners have very realistically pointed out the grave limitations of planning in a shortage economy, particularly in a democratic set-up. That our complimentary resources are too short of our needs, and occupational distribution of population too unbalanced have been underlined. While admitting the need for increased tempo of industrialisation to bring about an optimum occupational distribution of population, the Plan has correctly laid more emphasis on agriculture. For

only when agriculture has been made less primitive and peasant less poverty-stricken that industrial development can proceed at a satisfactory pace. A contented peasantry and flourishing agriculture mean more capital for industrial investment and a wider market for industrial products. As higher technique is introduced in farming and other auxiliary operations, the necessary labour for industrial employment will become readily available. This process will, of course, be mutually inter-dependent for in a transitional economy improvement in the technique of agriculture is as much dependent upon the development of industries, as the latter is upon the former. At present the need is to break up the vicious circle so that such a process may start. We must admit that the Plan fully realises the need of it. And in order to bring it about, the Plan has laid an over whelming emphasis on food self-sufficiency programme. Admittedly this is the chief burden of the whole plan.

If India attains food self-sufficiency, we will be able to save our foreign exchange resources, abolish food rationing, make the people less discontented, reduce corruption and restore general order in the economy. Similary as we proceed towards the goal of attaining self-sufficiency in cotton and jute, the two of our most important industries are likely to acquire a sounder footing. The capital saved in this way can then be easily diverted towards general economic development.

The Plan has emphasised the need for removing the social and institutional bottlenecks from our agrarian society, while providing for more intensive cultivation. In

respect of technical improvements, the Plan makes provision for gigantic river valley and multi-purpose schemes, for more fertilisers, manures, wells, tanks and better seeds. In this way the intensive cultivation is expected to bring about a considerable increase in food supply. The rest would be made up by reclamation of new land and the development of unused lands.

In order to generate the necessary enthusiasm among the peasants to resort to more intensive cultivation, the scheme of community development projects and rural extension service have been planned. They are supposed to provide the necessary social lever to bring about a complete regeneration in the rural life. It is hoped that once this enthusiasm has been generated, it would be usefully utilised for nation-building activities and social uplift through Bharat Sewak Samaj, an organisation created to secure mass cooperation for the successful execution of the Plan.

However, it was felt that a complete re-organisation of agriculture would remain a dream unless the feudal framework was completely broken. For centuries the feudal system, based on the exploitation of ryots through high rents, usury and physical torture, acted as a formidable obstacle in the way of all genuine urges of cultivators to make improvements in the soil. The complicated legal structure in respect to tenancy and protracted litigations continued to hinder any real improvements in agriculture.

While the land reform measures undertaken in various States are expected to liberate the peasants from the feudal yoke, necessary tenancy legislations will reduce the

number of middlemen and simplify tenancy systems. The creation of Panchayats in the villages will carry the democratic message to far off people in the interior most regions of the country, and Panchayat Courts will reduce litigation and minimise the chances of miscarriage of justice in minor cases.

The economic measures, suggested by the Plan to bring about the necessary increase in production, consist primarily in retaining controls on food price, to maintain the stability of price and relative price ratios between food and cash crops, and to continue the policy of procurement. It was realised by the Planning Commission that these measures must be kept up at least till the fulfilment of the targets of food production. Any rise in the price of food would create unbearable pressures on the Plan and may generate inflationary forces in the economy—a danger which is further heightened by the proposed high level of deficit financing. The need for maintaining the relative price ratios at the present level has been felt necessary in order to keep the prices of cash crops down. An increase in their prices will mean diversion of resources from food to cash crops which would endanger the fulfilment of food self-sufficiency programme on the one hand, and on the other would affect even more adversely the cost-price ratio in such raw materials using industries. In short, any such imbalance would completely wreck the Plan as a whole.

The above paragraphs contain the spirit and approach of the Planning Commission towards agricultural planning. From the review it seems that the Plan has in reality taken

up the objective of planning the agrarian society as a whole, and in all it aspects. But a close scrutiny of the Plan will reveal that it is unduly biased in favour of technical improvements. In a way it is a legacy of their predecessors, the British experts, whose approach was mainly technological. When we say that the Plan is biased in favour of technological factors, we do not suggest that such improvements are not necessary, or that the Plan should not have emphasised them. But we fear that it reflects a somewhat superficial approach. More fertilisers, better seeds, etc. will undoubtedly bring about an increased production in the immediate future, but under present conditions a saturation point will soon be reached, when it will no longer be possible to bring about further improvements. From this point of view, perhaps the only redeeming feature is the recommendation to start cooperative village management and consolidation of holdings on the basis of cooperative farming. But perhaps this provision can be successfully implemented only when large scale social and agrarian reforms have already taken place.

In respect to land policy, the Plan seems to be running in different directions. It is encouraging capitalist and rich peasant farming on the one hand, and cooperative farming on the other. The feudal lords who retain *'Sir'* and *Khud Kasht* land would be converted into capitalist farmers with the help of compensation money received from the Government. The middle and poor peasants have been advised to form themselves into cooperative unions. For the landless proletarians, the Plan has suggest-

ed 'Bhoodan yagna' and cooperative settlement over the newly reclaimed areas.

From the foregoing account it is clear that a human approach has been very much avoided. The Plan has suggested only half-way measures. Though it has frequently paid lip service to the desirability of bringing equality in social status and has expressed concern at the rising population of landless workers, it has exhibited great vagueness in dealing with the problem. Distribution of land among the landless, lightening of their burden by scaling down their debts and a provision of subsidiary employments would have been really justified and desirable. But prejudiced in favour of stability *vis a vis* progress in social directions, the Plan has failed to give due attention to the poorest section of Indian population.

Again, the process by which the feudal order is sought to be broken up is not above question. There was no great justification in granting collossal amounts of money as compensation to the landlords along with *Sir* and *Khud Kasht* lands. Neither socially, nor historically did the landlords justify such a lavish treatment. We, of course, do not suggest that they should have been rendered social destitutes. Perhaps a rehabilitary grant would have served the purpose. But the way in which funds have been collected from the relatively poorer sections of the population for payments to the relatively richer sections is clearly inequitous. The Plan has implicitly laid the the foundation of social inequality in the country-side.

We have all along felt that large scale technical improvements must be brought about to clear the way

for economic development. Road making, well digging, afforestation, sanitation and literacy drive are certain things which, among others, can be usefully undertaken in case the surplus population of the villages is conscripted and utilised in an organised manner. Such an idea has been given the name of 'land army'. We feel if such conscription is carried out through the Panchayat and other elected bodies, the element of coercion will be reduced to the minimum. While at work the Government may undertake to lodge and feed them and supply the necessary materials for development purposes.

Development of cottage industries and such other occupations as horticulture or fish-breeding have been provided for in the Plan. The two big snags in this are finance and marketing. Undoubtedly, cooperation is the best way of doing such things. But this is not likely to solve the problems of cost and technique. For these problems perhaps there is no easy solution. In mechanised cottage industries, the costs will be low and efficiency will be high, but initial investments will be large. To begin with such industrial units should be established in those areas where electricity is already produced and can be supplied at reasonably low rates. Later on with the general economic development of the country, the scope for such small scale industries will increase further in case resources, seeking large scale enterprises, are diverted into more important industries. In this connection we will commend a close study of the functioning of industrial cooperatives in new China and their suitability for our country.

It has been pointed out in some quarters that the

Five Year Plan has neglected the development of minor irrigation works and has provided an unnecessarily large outlay for big schemes. Certainly the minor schemes could have been made more labour intensive and also the losses and wastes resulting from incompeteney, neglect and corruption would have been considerably reduced. As Messrs C. N. Vakil and P. R. Brahmanand point out in their book "Planning for a Shortage Economy", the emphasis should have been laid on efficiency and balancing the relative costs and benefits from alternative projects at the margin, rather than permitting wastes on grandiose schemes. Even in the case of minor irrigation projects, it should have been necessary for the Plan to balance the marginal capital cost of one scheme with another in the same area, and allocation of resources to those areas where the benefits were likely to be more, or where for the same benefit the capital was likely to be less. Such an attitude towards the allocation of resources would have maximised efficiency and minimised wastes.

Now, approaching the end of our essay, we feel it necessary to remind our readers the need for proper price control as a *sine quo non* for effective planning. As pointed out earlier, the Government seems to be somewhat gambling with the price factor. It is necessary not merely to stabilise the general price level but also to keep the relative price ratios in such a way as to encourage the cultivation of those crops for which the Plan has established a priority. In a way the cultivation of cash crops is more likely to fluctuate with variations in prices than food crops. Actually an increasing level of food

production can be maintained only when the incentives for diverting land to cash crops do not increase. In the recent past, jute prices suffered a serious set back and the result has been decline in both acreage and output. Naturally, so long as rice prices are relatively more tempting, jute will be produced less. But a precipitate decline in jute prices will mean large scale suffering for the poor peasants. So there is the need to enforce not merely ceiling prices, but also the floor prices. This may cause annoyance to jute industrialists. But in democratic planning, where antagonistic forces are constantly striving to wreck planning efforts, the intervention of the Government in the larger interests of the mass of cultivators and economic development is most desirable and necessary. For it is these cultivators who, in the ultimate analysis, retain the last word in respect to the Plan and a farsighted Government should in no case ignore their interests.

To conclude, situated as we are, agricultural development is indispensable for accelerating the tempo of economic progress in the country. The Planning Commission has done, therefore, the right thing in giving the top most priority to it. But at the same time we should not forget that for agricultural development, there is first the need for an agricultural revolution to sweep away the primitive and unjust socio-economic structure of the village, and then comes the need for scientific agriculture. The former must precede the latter. Once agricultural revolution has swept away the time-worn structure, the application of science will do the rest. In the past the Government tried to bring in the second phase first. That

actually amounted to putting the cart before the horse. Hence the failure. Unfortunately, even now there is no full appreciation of these two distinct phases of agricultural development. We fear such an approach will not take us far.

APPENDIX
AGRARIAN REFORMS IN CHINA

Before the sweeping agrarian reforms were introduced, the Chinese society was feudal in character. Both the Government and the economy were dominated by feudal war lords. Feudal exploitation of peasantry and excessive usury resulted in the fall of agricultural production, pauperisation of Chinese peasantry and retardation in economic development. Famines stalked the land that was predominantly agricultural. Decades of civil war and foreign intervention had deprived whatever incentive was left with the peasant to improve production. Unbridled inflation deprived him of his meagre savings ; and utter corruption and greed among the government officers and agencies compelled him to revolt against the State.

When the Chinese communists came to power, the whole scene was changed. Inflation was curbed, economy restored, nation unified and military victories against the rival KMT armies ensured. Agrarian reforms broke the back of feudalism in Chinese rural society and thereby released dynamic forces which are so very necessary for economic development. The new rulers of China believe in industrialisation of their country. But, as is well-known, only a prosperous peasantry and rising agricultural production can form the basis of rapid industrial growth. It is this which explains the need and provides the justification for

agrarian reforms which the Chinese communists thought necessary to introduce.

As compared to agrarian revolution which swept through Soviet Union after the Bolshiveks came to power, the Chinese agrarian reforms look much less drastic. To be sure, the agrarian reforms in China also have a history. Hence before we discuss the Agrarian Reforms Law, which is only the culmination of a process, it will be better to briefly scan the stages through which the agrarian reforms have passed.

During the second world war, large areas of Chinese mainland came under the occupation of communist armies. By 1945 they had a territory of 8,87,000 sq. km. with a population of 250 million. As the civil war proceeded, the area under the occupation of Chinese communists gradually increased. As early as 1946 the C. C. P. led the peasant movement for restricting the powers of the landlords by confiscating a part of their land and transferring it to landless labourers and peasants. By 1946-47, about 60 million peasants acquired new land that formerly belonged to landlords. In September 1947, the Communist Party convened the All-China Agrarian Conference and adopted a "Basic Programme on Chinese Agrarian Law." It provided for complete abolition of land ownership right of all landlords and for the confiscation of land and other means of production owned by landlords and rich peasants, and their transfer to the landless workers and poor peasants. By the spring of 1948 about 3 million hectares of land, together with large number of cattle, implements and seeds were distributed among the

peasants who had either no land or were very poor. These reforms were carried out only in "old liberated" areas and benefited about 100 million peasants. By 1950 the whole of Manchuria and four provinces of North China had implemented the agrarian reforms which affected nearly 150 million peasants.

On June 28, 1950, the Central Peoples' Government Council adopted the Agrarian Reforms Law to direct the reforms in the newly liberated areas. This programme, which was comparatively more moderate than the previous one, was to be enforced throughout China, excepting the old liberated areas and minority areas like Tibet and Sinkiang. For the national minority areas, the new Government pursued a policy of first convincing the people about the desirability of introducing the reforms and then carrying them out.

By now the Agrarian Reforms Law has been implemented almost every where. In view of this, it is necessary to bear in mind its important provisions. The Agrarian Reforms Law in China, it needs to be emphasised, has abolished only 'the land ownership system of feudal exploitation by the landlord class', while 'the system of peasant land ownership shall be carried into effect in order to set free the rural productive forces, develop agricultural production and pave the way for the industrialisation of the new China" (Article 1). From this it is obvious that only the functionless, rentier class of landlordism has been abolished. Great care has been taken to see that the abolition does not go too far, and that the rural economy does not break down under the pressure of agrarian

revolution. As an illustration, land and other properties used by landlords for industrial and commercial purposes have been left untouched.

For purposes of implementation of the Law, the agrarian society has been classified and each interest properly defined. In the decisions concerning the differentiation of class status in the country-side, a landlord has been defined as follows :

"A person shall be classified as a landlord who owns land, but does not engage in labour or only engages in supplementary labour and depends on exploitation for his means of livelihood." It is further added that "any person who collects rent and manages the landed property for landlord and depends on the exploitation of peasants by the landlords as his main means of livelihood and whose living conditions are better than those of an ordinary peasant, shall be treated in the same manner as "landlord", and "any person who rents large areas of land from landlords, who does not himself engage in labour, but sub-lets the land to others for rent and whose living conditions are better than those of an ordinary middle peasant shall be classified as a sub-landlord. Sub-landlords should be treated in the same manner as landlords. A sub-landlord who cultivates part of his land should be treated in the same manner as a rich peasant."

This elaborate explanation of a lordlord and a sub-landlord and the treatment that they should receive indicate the meticulous care that has been taken to ensure that while exploiting landlords are punished, non-exploiting landlords are protected. Throughout the Law the

Chinese have exhibited a desire to maintain a rich peasant economy. This desire of the Chinese people is perfectly in tune with their policy to confiscate the bureaucratic capital, while encouraging and protecting the national bourgeoisie. It seems they have chosen this policy to ensure efficiency in economic development and to reduce the over-head social costs to the minimum. In a way the Chinese neo-democracy can be considered as a new variant of New Economic Policy of Russia under different circumstances and with a different background.

Regarding the attitude towards the peasants, the Agrarian Reforms Law lays down that only that much land should be requisitioned which is more than the land worked by them or worked with the help of hired labourers. This action has been taken possibly to eliminate the chances of rich peasants converting themselves into rent receiving landlords. Excepting this provision, the law specifically lays down that the property of rich peasants should be protected. There is, however, one main category of rich peasants called reactionary rich peasants. According to the Law those who participated in the counter-revolutionary activities or are still doing so, should be treated as reactionary rich peasants and their properties should be confiscated. But it seems this is a punishment for illegal activities rather than an element of reform.

As mentioned earlier, Agrarian Reforms in China have inaugurated a period of peasant proprietorship. It has been specifically stated that the land of peasants shall be protected by law. For the present it seems to be a

transitional provision for the ultimate aim is collectivisation *via* cooperative farming.

The Chinese communists do not believe in paying compensation to the landlords. Only where lands and properties of religious, educational or phlianthropic institutions are taken over, steps will be taken by the Government to meet the financial obligations of such bodies in consequence of deprivation of their source of income.

Regarding the manner of distributing land and other properties among the peasants, the Agrarian Reforms Law lays down an elaborate procedure. Steps have been taken to see that distribution is effected as peacefully and equitably as possible. According to the Law all such lands and properties are to be taken over by the peasants' associations and the distribution is to be done "in a unified, equitable and rational manner." The ex-landlord has also been entitled to receive an equal share from the divisible pool so that he may be able to earn his living by work and reform himself through physical labour. The law, however, specifically lays down that "land owned by the tiller shall not be drawn upon for distribution."

Apart from the above mentioned directions, the Reforms Law has also laid down many other instructions concerning distribution of land. For example, it has provided for numerous allowances for soldiers who died on the side of communists or those who are in the army but whose families live in villages.

Besides land reforms, the Chinese Government have imposed a progressive system of grain-tax. Care has been taken to see that production does not suffer and

peasant's incentive is not curbed. According to the new system, "the highest rate for the poor peasant should not be over 10 per cent of his summer yield, for the middle peasant not over 15 per cent, for the rich peasant not over 25 per cent, for the landlord not exceeding 50 per cent, and for special cases not exceeding 80 per cent." These taxes are levied only on principal agricultural products. It has been clearly laid down that no taxes should be imposed 'which hinder the development of agriculture, rural subsidiary occupations and live-stock breeding."

The reason for drawing attention to the taxation policy of the Chinese Government is to show that in their enthusiasm for social change, they have not forgotten basic economic principles. It is, however, necessary to point out that the grain-tax remains the greatest source of revenue for the Government, a sign of economic backwardness. In 1950-51, revenue from grain-tax accounted for 41·4 per cent of the total revenue.

It will be fruitful to devote some space to the assessment of agrarian reforms and changes that are still going on in Chinese villages. Upto 1952 the Agrarian Reforms had affected a population of 300 million. If this is added to the population of old liberated areas, the percentage of the Chinese rural population covered by these reforms will be about 90 per cent. This could be possible only by attempting a total mobilisation in the villages and conducting fierce class struggle between the landlords and the peasants. We find that each year land reform teams, consisting of 3,00,000 persons, on an average, were organised to implement land reforms. About 700 million *mou*

of land have been distributed. It has been estimated that more than 30 million tons of grain used to be collected every year by the landlords from these lands. Now peasants no longer pay it. Thus this means a great relief to the over burdened peasantry. It has also resulted in an increase in food production. In 1952 the total grain output was 40 per cent above that of 1949. It is further claimed that land reforms have rapidly accelerated the political conciousness of the people and the cultural development of rural areas.

Of still greater significance is the success of co-operative movement in China. It is claimed that 'tens of millions of peasants have actively joined mutual-aid teams and agricultural producers' cooperatives. In the year 1952 'the marketing and supply co-operatives had a membership of 106 million.' The number of agricultural producers' co-operatives in 1952 was 4000, and of supply and marketing co-operatives more than 34,000.

The co-operative movement started with the organisation of mutual aid teams which do not interfere with the right of peasant over his land. These mutual aid teams can be classified into three groups. In the first group are those teams which are of temporary nature and have only seasonal importance. The second group consists of permanent mutual aid teams which combine mutual aid in agriculture with mutual aid in other occupations and draw up the elementary production plans for its members. And the third consists of the rural producers' cooperatives to which the peasants contribute their share of land. The last one is only one

step below the collective farms. The Government's declared policy is to encourage cooperation and gradually widen the areas under cooperation. This will facilitate the transition of agriculture under peasant proprietorship as it is now to full-fledged collective basis ultimately.

At the present the main hinderance to the rapid growth of collective farms lies in the backwardness of Chinese economy. Obviously the pace of collectivisation will depend upon the tempo of industrialisation. As the demand for labour grows in urban industries, and agricultural implements become available, the pace of collectivisation will be stepped up. In Russia the Government went too far and also too fast in its craze for collectivisation and so paid a heavy price. The Chinese communists do not want to repeat that mistake. Similarly in eastern European countries also the pace of collectivisation has been kept deliberately slow.

The Chinese have commenced their First Five Year Plan which integrates agricultural production with the tempo of industrialistion. The success of their Five Year Plan will be the greatest proof of the vitality of agrarian reforms. Just now there is no dearth of critics who attack the agrarian reforms on numerous grounds. On one extreme there are those who indignantly protest against the confiscatory nature of agrarian reforms, while on the other hand some feel dissatisfied because the reforms do not go sufficiently far. Certainly much of this criticism is due to the fact that generally the critics do not fully recognise the objective need of the Chinese economy as also the vital role of agrarian reforms in stepping up the economy to a

higher level.

We in India are also engaged in the task of agricultural reconstruction with a view to raise the economy to a higher level and make it more broad-based and balanced. In view of this any study of the measures of agrarian reforms cannot but be of immense value. Not that we should blindly imitate what has been done else where, but we can certainly profit from the experiences of others.

BIBLIOGRAPHY

Agrawal, G. D. — *Agrarian Reforms and Agricultural Reconstruction*

Aiyer, Y. N. — *Cooperation and Indian Agriculture*

Bhattacharya, J. P. — *Mechanisation of Agriculture in India*

Burns, W. — *Technological Possibilities of Agricultural Development in India*

Govil, K. L. — *Marketing in India*

Iyenger, Kesav — *Studies in Indian Rural Economics*

Jacoby, E. H. — *Agrarian Unrest in South East Asia*

Kolhatkar, V. Y. — *Reconstruction in Indian Agriculture*

Malhotra, P. C. — *Stabilisation of Agricultural Prices in India*

Mukerjee, R. K. — *Economic Problems of Modern India*

" " — *Land Problems of India*

Nanavati and Anjaria — *The Indian Rural Problem*

Rajnekar, D. K. — *Agricultural Finance in India*

Ramaswamy, T. N. — *Economic Stabilisation of Indian Agriculture*

Sayana — *Readings in Rural Problems*
Sharma, K. K. — *Reserve Bank of India and Rural Credit*
Singh, Baljit — *Whither Agriculture*
" " — *Population and Food Planning in India*
Singh, Charan — *Abolition of Zamindari*
Singh, Gurucharan — *Recent Agrarian Reforms in India*
Singh, Tarlok — *Poverty and Social Change*
Tiwari, R. D. — *Indian Agriculture*
Wadia and Merchant — *Our Economic Problem*

Reports

First Five Year Plan, Final Report
U. P. Zamindari Abolition Committee Report
Foodgrains Policy Committee Report
G. M. F. Enquiry Committee Report
Famine Commission, Final Report, 1945
Agricultural Legislation Vols. 1—3
Congress Agrarian Reforms Committee Report
Cooperative Farming (R. Bank of India)
Cooperative Sub-Committee Report
Towards Land Transformation (Ministry of Food and Agriculture)
National Planning Committee Reports on :
Rural Marketing and Finance
Land Policy, Agricultural Labour and Insurance
Crops—Planning and Production

Journals and Periodicals

Indian Journal of Agricultural Economics
Indian Economic Journal
Indian Economic Review
Indian Journal of Commerce
Rural India
Agricultural Situation in India
Eastern Economist
Economic Weekly
Commerce
Capital
Indian Finance